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ABSTRACT

The ERIC Report was a brief experiment with a formal journal for disseminating information between the ERIC Clearinghouses and from ERIC to the user community. The experiment lasted for approximately one and a half years. The five issues were dated: May-June 1973; October-November 1973; March-April 1974; July-August 1974; and November-December 1974, respectively. Each issue contained: guest editorials; feature articles; news items from the Clearinghouses; a Washington report; information on new products, services, and reference tools; and a "User Speak Out" letters and comments section. Each issue was approximately 30 pages in size. (WTB)

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THE ERIC REPORT

NUMBER 1 MAY-JUNE 1973

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IR 050 540

Educational Resources Information Center

AN INTRODUCTION TO THE ERIC REPORT

The ERIC system is eight years old. We have long felt that the system would benefit from a journal for disseminating useful information between Clearinghouses and to the continuing users of ERIC products. In this, our first issue of the ERIC REPORT, we have adopted communication as a major theme and have invited comment from the Clearinghouses and guest contributors that might be of interest to others in the system.

The Clearinghouse for Junior Colleges, which has the responsibility for coordinating this new report, welcomes any suggestions and ideas for future issues.

Arthur M. Cohen
Director
ERIC Clearinghouse
for Junior Colleges

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THE ERIC REPORT

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GUEST EDITORIALS

For almost six years, the Carnegie Commission on Higher Education has given close attention to the ways colleges and universities are adapting themselves to the enormous problems and challenges they face in the last third of the twentieth century. During our studies we have been impressed, on the one hand, by the ability of some institutions to change rapidly as enrollments grow and then become stabilized as budgets expand first rapidly and now more slowly, and as new tasks and objectives are imposed upon them. On the other hand, we cannot help but notice that the distribution of good ideas and effective solutions seems to be uneven and spotty despite the fact that the problems to which they are addressed are widespread and quite general.

There are many reasons for the spottiness of innovation in American higher education. For example, we take pride in the diversity of our colleges and universities and insist that all institutions need not be alike. It follows that some good ideas will not fit every campus. Our colleges and universities are, also, conservative institutions and are inclined to accept new ways of doing things only *in extremis* and usually only after the effectiveness of the changes is fully proved in advance. But I believe that these reasons account for only a part of the uneven distribution of change and reform in colleges and universities. Another reason is that communications among our colleges and universities are badly in need of improvement.

It is true that there are many professional and discipline-oriented organizations in the United States that are concerned with higher education in one or more of its aspects. But it is also true that there are relatively few opportunities for the members of one such organization to know what the members of the others are thinking and proposing. Presidents tend to meet with other presidents; physicists meet with physicists; admissions officers meet with admissions officers; and so on. And the channels among such groups are not kept open enough for us to get any overall sense of higher educational developments. We must rely, on the whole, on relatively few publications that cut across professional and disciplinary lines. Among the more notable of these are *Change* magazine, *The Chronicle of Higher Education*, the *Journal of Higher Education*, the ACE's *Higher Education and National Affairs*, and the coverage of higher education by the national public press. It is doubtful, however, that any one of these sources is followed regularly by even a majority of the people responsible for higher education activity on all levels in this country.

A badly needed and woefully underadvertised move to correct some of our communications problems has been made with the establishment of the various ERIC clearinghouses. By their subject-and-issue orientation, they tend to cut across some of the institutional, professional, and disciplinary barriers that impede communications today. It is therefore a privilege to help inaugurate this new journal, which has as its purpose to make still another cut across the segments of interests in higher education, to provide one more channel to the information that fuels change and innovation and, perhaps most important of all, to help us all find the common truths and effective practices that we can use to advantage in advancing our colleges and universities in the years ahead.



INFORMATION AND CHANGE

by Clark Kerr
Chairman, Carnegie Commission
on Higher Education

Knowledge is power.

So said Francis Bacon in 1597 and it has held up remarkably well. If anything, Bacon's aphorism is even more true today because new knowledge, accumulating at an ever faster rate, has led to exponential increases in power of all kinds.

Yet the knowledge/power equation in most instances is not now a direct relationship. Unlike Bacon, most of us do not consider the whole of knowledge to be our province. Even if we possessed his depth of mind and scope of vision—no mean accomplishment—the whole of knowledge today is vastly greater than in the 16th century. So, to one degree or another, we are specialists, knowledgeable about one or a few areas, ignorant about many, and we have to rely on one another to help fill in the gaps of our ignorance. In terms of the whole of knowledge, each individual is aware of only a fraction and so is relatively powerless, but a lot of people acquiring different parts of the whole can put all the pieces together. Knowledge is power, but today more than ever the process depends on communication among people and particularly among decision makers.

"And that is where higher education comes in. Our libraries alone are great information systems, and entire campuses have almost limitless potential for communicating, for getting information from those who create knowledge to those who can apply it. Indeed, the genius of the American way of going about higher education has been a belief that knowledge unused is sterile, that the public must be served not only by producing educated persons but also by a pragmatic application of research. Where this has been emphasized, as in agriculture, following the Morrill Act in 1862, the results have been truly spectacular.

But have we been as good to ourselves as we have to others? Have we been as careful as we might to get the latest information on financing, growth problems, curricular innovations, etc., to those who need it most, the educational decision makers? I think even a casual investigation would reveal a discrepancy between ideal and practice, especially in terms of how information is received. There is not so much of a dearth of information as a lack of organization, of matching subject matter and interest persons. Whatever the size of the gap, however, it is smaller than it was yesterday, for *ERIC Report* has come into being to help assure that knowledge about education will be translated directly into the power to deal with it effectively. I think Francis Bacon would be pleased.

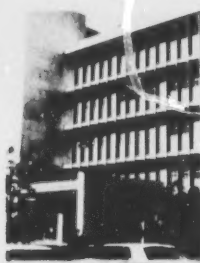


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THE POWER OF KNOWLEDGE

by Charles J. Hitch
President, University of California

FEATURE ARTICLES



1. SMERC, in Redwood City.



2. Point-to-point computer communication between SMERC and its satellites.



3. Lockheed's ERIC/DIALOG provides SMERC with its computer capabilities.

COMMUNICATORS COOPERATE

by The Clearinghouse for Educational Media and Technology

Interactive television . . . computer conferencing . . . world-wide satellite systems . . . instantaneous data transmission.

As the Clearinghouse on Educational Media and Technology, ERIC at Stanford processes hundreds of documents which extoll the advantages and virtues of the following and other kinds of modern communications systems. For example:

- A teacher can receive immediate feedback on pupils' understanding via pushbutton panels on their desks.
- School-age children in isolated population pockets in the Rocky Mountains can receive as sophisticated an education as New York City dwellers can because of a communications satellite.
- Nine-year-old Joseph, home in bed with a broken leg, keeps up with his math class through a two-way cable television hook-up.

While these and other modern communications systems are developed, it's become apparent to Clearinghouse personnel that we can't forget the most important kind of communication of all—face-to-face contact. We've come to realize that a sophisticated nationwide information system such as ERIC depends to a great extent on personal contact with its users.

This article is the story of one way the Stanford Clearinghouse communicates with its users—through a local information center called SMERC.

SMERC—San Mateo Educational Resources Center—in Redwood City, California, is a neighbor of the Clearinghouse. Its original function was to serve as a resource center for San Mateo County only; it now serves nearly all parts of California, as well as school systems in Arizona and Nevada.

ERIC at Stanford and SMERC have been communicating since SMERC's birth in 1968 when the San Mateo County Office of Education established SMERC to meet the need for quick and widespread dissemination of educational information to the schools in the county.

Frank Mattas, SMERC's first and only director, recalls those early days: "From the beginning, the ERIC Clearinghouse directors were instrumental in our center's success. We would not have had the impact we did in the Bay Area if it were not for the cooperation we obtained from the Stanford Clearinghouse.

"At first, Clearinghouse personnel helped us with such

questions as 'What is a specific description of information dissemination?' The director filled in the blanks in my knowledge when I was required to present a master plan for our information system in six months' time. We used Clearinghouse techniques to define our user groups, for instance.

"We still have questions for which we are working out answers together with the Clearinghouse. For example we are seeking a delineated description of different levels of information searches."

Cooperation between ERIC at Stanford and SMERC has come in three major areas: (1) a sharing of professional knowledge about the running of an information center, (2) a sharing of resources on specific information searches, and (3) cooperative presentations to users at conventions, workshops, training sessions, local meetings, etc. In addition, the two centers share publications, microfiche, and resources, when appropriate.

But the communication between the Clearinghouse on Media and Technology and SMERC is only the beginning of the story. For that communication in turn leads to communication with the users—the ultimate goal of both information centers.

Most of us know who ERIC users are. But a description of SMERC users might be informative. SMERC users approximate closely the types of educators: Very generally, out of 100 typical information requests, 20 come from elementary teachers, 20 from secondary teachers, 5 from elementary principals, 4 from high-school principals and the rest from school psychologists, programs coordinators and others, Mr. Mattas estimates.

The main emphasis is, of course, placed on service to the teachers, and secondarily to school administrators. One report notes: "Although no formal user surveys have been undertaken, observations have been made based on the day-to-day operational experiences. There is a very strong desire among users for immediate service and rapid response. In general, elementary teachers request everything: 'Give me everything you have on reading.' Secondary teachers want the answer in as small a package as possible; one-half of a journal article is fine. Administrators, on the other hand, request five or six articles which present pros and cons."

Although it began strictly as a resource for San Mateo County, SMERC has grown in four years to a true information network. Satellite resource centers are operating in the California counties of Alameda, Marin, Merced, Santa Barbara, San Benito, San Bernardino, Santa Clara, Santa Cruz, Monterey, Solano, Sonoma, Sacramento, Placer, Riverside, Tulare, and Yolo. Other supporting agencies include the Association of California School Administrators Program Development Division, LaVerne College, the Program Development Center at Chico, Whittier College Information Center, and the State of Arizona through Arizona State University.

Conventional compilation approaches ("Collect lots of information and put it on shelves") were avoided when SMERC began. Instead, the center was geared to the functional or problem-solving approach. Besides a complete set of ERIC indexes and microfiche files, the SMERC collection now includes over 15,000 books (e.g., curriculum materials and professional books), over 700 educational periodicals (including all indexed in CIJE), a basic reference collection, individualized instructional packages and an extensive collection of reports and fugitive materials (FIDO—Fugitive Information Data Organizer).

Because of this approach, SMERC has found a variety of ways to communicate with its users. As Frank Mattas, director, explains it, communication for his center is equally dependent upon publications and upon personal involvement of the user.

Publications include brochures, flyers, posters, newsletters, accession lists, bibliographies, tables of contents service, reviews of the literature, state-of-the-art summaries, and a human resource service.

As for personal involvement of the user, Mr. Mattas notes, "Our contact with the users in continual and constant—it never ends—it is a process of constant renewal.

"Our main thrust is to involve the people," he explains. "We train a linking agent at each subscribing school district or county office. We bring him here for two or three days of training. We teach him how to do a search. We make him conscious of information management. Then the ripple effect sets in. He involves others in the district—librarians, resource people, teachers. Also, we train his staff. We teach his secretary, so when someone calls him for a search and talks to her, she can help formulate a decent search.

"We visit one to three of our subscribers every day—either myself or one of the research assistants. Then we get the information coming the other way. We find locally produced material—we call them PIPS (Programs in Progress). They are put on file at the center and made available to others.

"Also, whenever we acquire a county, we assign a permanent research assistant to it. That way, all the people in the county know her. They can talk to her. They're not afraid to tell her she structured a search incorrectly. They communicate."

A SMERC publication explains how an information center can communicate with its users:

- You can tell (through newsletters, articles, conferences, speeches, conversations).
- You can show (through participant observation, demonstration, speeches, plays, slides, films, etc.).
- You can help (through consultation, giving service, trouble shooting, etc.—*but on the user's terms*).
- You can involve (by asking the user to help with the development, testing, or packaging of an instructional unit, and to act as a satellite or agent to cause others to prepare).
- You can train (by familiarizing the user in research and writing, or by assisting him to increase his skills through workshops, inservice training, basic encounter sessions). Training can involve telling but differs in that the user makes a commitment to learn.

Does the combination of personal contact and publications pay off?

In its first two years of operation, SMERC received about 40 requests per week for information searches. Now, it receives 120 per day. Its staff has increased from 2 to 26 full-time employees. Its hardware has increased from one old-fashioned liquid reader-printer to a complete processing and reproduction center for microfilm and photography. Its budget has increased from \$33,000 a year, to \$890,000 per year, and the entire operation is self-supporting.

Looking at it in other terms, it has increased from serving one county to serving 37 organizations. Its service area has increased from 200,000 average daily attendance to 2,000,000 average daily attendance.

The growth can also be shown in a comparison of the number of search requests for the month of September in both 1971 and 1972.

	Sept. 1971	Sept. 1972
In-depth Searches	114	230
Reproduction Searches	98	233
Computer Searches	9	30
Microfiche	1699	4147
Photocopies	2198	5770

Figures are one way of looking at the success SMERC has had in communicating with its users. But another facet of the picture can be seen by looking at some individual requests.

In the category of unusual request, research assistants recall these:

"What would happen if Jane Addams came to San Francisco in 1970 and saw the street scene. Please make the information 10 pages, double spaced, with an appropriate bibliography."

"Please send me a term paper on Ernest Hemingway." (The Center politely refuses this type of request, its director notes.)

"Please send me information about these six types of poisonous plants: "(the research assistant can't recall the names—in fact, she admitted she couldn't pronounce them, even though she did do the search).

"I have only Spanish-speaking girl in my class. Please send me a bibliography of information about moles, written in Spanish."

In the category of "Biggest Search," a project done a year ago takes the prize, according to Mr. Mattas. SMERC supplied information on the complete reorganization of a junior college district, including tax structures, faculty reorganization, behavior modification, decentralization, etc. The information was organized by department, and included material on virtually all the kinds of decisions which need to be made when reorganizing a junior college district. Over 1,000 fiche were reproduced, representing over 625 documents.

The second biggest project was one for LaVerne College, California, which involved a total search of all files for any kind of materials relating to William Glasser's type of instruction program. From some 20,000 documents, between 5,000 and 10,000 documents were found and categorized for different college departments. The resulting "A-Z" catalog is being used in college extension classes throughout the United States.

Even though SMERC is very much able to function on its own as an information resource center, communication between its people and ERIC at Stanford people is still at a high level. For instance, just recently SMERC was asked for materials on the use of photography in the classroom as a modern teaching aid. ERIC at Stanford helped with the search and came up with some resources.

Very soon, SMERC and ERIC at Stanford will cooperate with two convention displays and presentations: The Association for Educational Communications and Technology in Las Vegas, and the Media Education Conference Association Convention in San Diego. The Stanford Clearinghouse and SMERC give joint presentations to groups of teachers on the ERIC system, and Clearinghouse personnel also help in the training of SMERC linking agents. In all of these presentations, Clearinghouse personnel present the national ERIC picture and SMERC personnel present the local picture.

It's turned out to be a good partnership. And good use of communication—communication between two information centers which leads in turn to communication with users—the ultimate goal of SMERC and of the Educational Resources Information Center.

A COLLEGE USES ERIC

By Alfred R. Hecht

A new service offered by the Moraine Valley Community College (Illinois) Office of Institutional Research provides ERIC materials, promotional activities, and service evaluation to the college staff, and assists other institutions seeking ways to increase ERIC use on their campuses.



ERIC SERVICES PROVIDED

A variety of aids is available to help staff members use ERIC materials. The college's sound filmstrip collection includes "All About ERIC," "Introduction to ERIC," "How to Use ERIC" and "ERIC Advanced Training Program." These filmstrips may be reviewed by individuals or small groups in the Individualized Learning Center, immediately adjoining the ERIC materials.

Printed materials for reference use include "How to Use ERIC," by Central ERIC; "How to Search the ERIC File," by the ERIC Clearinghouse for Junior Colleges, and "Worksheet to Organize Steps in the ERIC Search Process," by the ERIC Clearinghouse for Teacher Education.

Probably the most popular user aid, however, is consultation with a member of the research staff on how to use ERIC. Staff members use ERIC on a walk-in or appointment basis depending on their familiarity with the collection and on the nature of the information needed.

Depending on the number of descriptors used, retrospective searches may be performed manually by the user or electronically by the QUERY computer program. Copies of the *ERIC Thesaurus*, *Cumulative ERIC Indexes* and *Cumulative ERIC Abstracts* assist users with manual searches. Because MVCC's professional collection includes multi-media resources in addition to ERIC, staff members usually discuss their information needs with a member of the research staff who assists them in constructing a QUERY search and directs them to additional sources of available information. Due to the extensive computer time required for QUERY searches, computer searches of RIE and CIJE are limited to batch-processed searches once a week. When a CIJE search identifies a pertinent periodical article which is not available in our college library, a copy is obtained through photoduplication services.

Although the ERIC microfiche collection and a table model reader-printer are housed in the Office of Institutional Research, portable fiche readers enable staff members to review ERIC materials in their homes or offices.

ERIC PROMOTION ACTIVITIES

Formal and informal methods are used to promote the use of ERIC materials by MVCC staff members. The Institutional Services Handbook which describes available ERIC services, may be a new staff member's introduction to ERIC at MVCC. *Research Digest*, MVCC research newsletter, informs staff members of acquisitions for the college's professional collection and often includes resumes of ERIC articles of general interest.

A series of flyers promoting ERIC use is sent to staff members at scheduled intervals. One flyer, "Do You Have a Question?" was patterned after the ERIC folder "To Educators Who Have Questions." The questions in the college flyer are related to MVCC and include a microfiche of an MVCC report from the ERIC collection. This promotion flyer was forwarded to all staff members one week before an open house held to inform them about ERIC and other institutional services. ERIC is promoted informally by research staff through individual staff members meeting with individuals or working on committees. ERIC review is continually suggested by the research staff.



Because women staff members complained that the portable microfiche readers were "too heavy," staff members were invited to evaluate lighter models. Vendor demonstrations of compact portable readers were scheduled in several staff office areas. These demonstrations directly involved staff members who had agreed to participate in the review process and indirectly attracted the attention of other staff members in the open office areas. When users review microfiche in their open office areas, a similar "diffusion" effect can expand ERIC use.

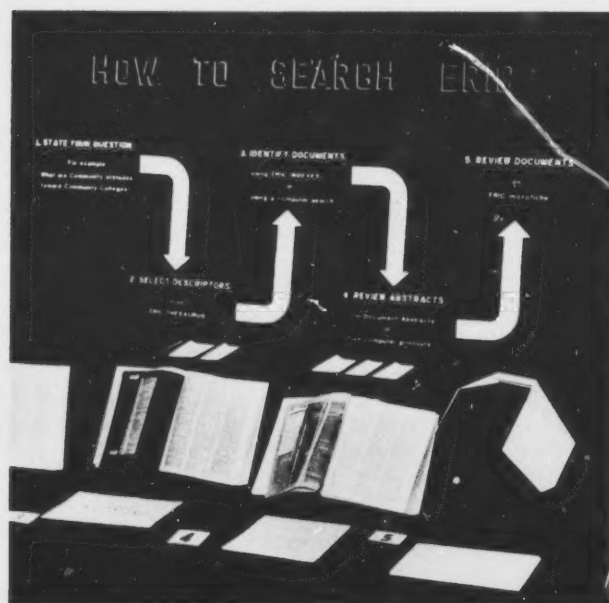
EVALUATION

As a result of ERIC promotion activities, since September 1972:

- A total of 20 full-time staff have reviewed ERIC microfiche.
- The college president, the executive vice president (who is acting dean of instruction), the vice president for business services and the dean of institutional services have reviewed ERIC microfiche.
- A QUERY computer batch search of ERIC and CIJE files with an average of ten search requests per batch has been run each week.
- An average of 38 microfiche has been in circulation at the beginning of each month.
- User comments on ERIC materials and mechanics have been generally favorable.

Comments of three users are typical of MVCC staff reactions to ERIC:

- "Obtaining and using ERIC materials was simple and convenient. Reviewing ERIC materials helped clarify my thinking, validated some personal views and refuted others, and directed me to additional resource materials."
- "Although the quality of the microfiche was inconsistent and extensive reading created eyestrain, ERIC materials were easily located and the portable reader was convenient and easy to use. The resumes are particularly helpful in identifying relevant documents. I was impressed by the depth and breadth of ERIC materials. I was able to compare programs across the country with one being considered at MVCC."
- "The organization of materials makes ERIC materials easy to retrieve. Within 20 minutes my first ERIC search identified several documents which pertained exactly to my needs. ERIC helped me learn what had been done on my topic and suggested procedures and instruments for local replication."



ERIC Display at MVCC Institutional Services Open House.

FUTURE PLANS

A number of plans for the development of MVCC's fledgling ERIC service are emerging. The next step in the formal ERIC promotion campaign will be to direct subject-oriented material to instructors. For example, materials developed by the Clearinghouse for Science, Mathematics and Environmental Education are being duplicated for distribution to instructors of those disciplines.

This spring a user evaluation of ERIC services and materials will be included as part of the annual staff evaluation of institutional research services. Copies of user evaluation instruments employed by other ERIC information Centers will be appreciated.

Although upgraded hardware has halved, run-time for QUERY searches, upgraded software will be necessary to permit daily rather than weekly computer searches. For economy as well as user satisfaction, C.P.U. time must be reduced from hours to minutes.

When grant support has been obtained, MVCC ERIC services will be extended to underlying elementary and secondary schools and perhaps to adjoining community colleges.

SUGGESTIONS

On the basis of limited MVCC experience with ERIC promotion several suggestions are offered to institutions seeking ways to increase ERIC use on their campuses:

- Gear ERIC promotion to staff interests and specialties. The more closely promotion materials are addressed to specific types of users, the more likely they will view ERIC as relevant to their information needs and become ERIC users.
- A combination of formal and informal promotion procedures has greater impact on staff than exclusive use of one procedure. Formal promotion activities create awareness and serve as reminders of available service. Information activities reinforce formal activities and help staff learn the relevance of ERIC for their ongoing tasks.
- Make available a variety of portable readers. MVCC users like being able to review fiche at their convenience in their own settings rather than being restricted to reading in a central location during scheduled hours. Having different sizes and styles of readers available accommodates differences in staff hardware preferences.
- Retrieve information from a variety of information bases. Because user information needs are not data-base specific, the larger the number of data bases reviewed the more comprehensive and satisfying the searches will be. Adding a computer review of CIJE files to one of RIE files is comparatively inexpensive. Manual or computer searches of *Dissertation Abstracts* (DATRIX) or *U.S. Government Report Announcements* provides an even broader data base. At MVCC, a computer-generated Key-Word-out-of-Context index directs staff to multimedia professional collection materials.
- Provide documents in addition to bibliographic data in response to information requests. Users who immediately receive documents containing data related to their needs are more satisfied than those who must wait for interlibrary loans. A sequence emerging at MVCC immediately provides a user with materials available from the professional collection. Next, he receives computer-generated resumes of ERIC documents and CIJE articles. He can review ERIC microfiche while waiting for interlibrary loan of CIJE materials unavailable locally.

These are a few of the ways ERIC resources can be utilized in school and college settings. An institution can tailor its uses of the system to fit its staff preferences with the pattern of service determined by the imagination of its organizers. Here ERIC provides a communication link between the college and the broader community of educational practitioners.

NEWS FROM THE CLEARINGHOUSES



COMMUNICATION IS A THREE WAY STREET

Each Clearinghouse staff must be cognizant of the communication problems that are unique to its particular field. Its response to these problems will mark the Clearinghouse structure, its emphases, its products, and the other services it provides.

The Junior College Clearinghouse offers a case in point. It views communication as a three-way street—information, interpretation, dissemination. In common with other clearinghouses, its first responsibility is to gather the information and in the process, to separate the chaff from the wheat, the trivia from the substantive. This is the least difficult of the three-pronged thrust. The second responsibility is to disseminate this information through the ERIC channels, special reviews, and topical papers, briefs, and responses to inquiries. This, too, is relatively straightforward. But, because of certain characteristics of the field the Clearinghouse serves, it has had to emphasize the interpretive function.

This approach is essential for several reasons. The junior college is relatively young in the family of educational institutions. Moreover, the field is fluid—even its generic name is still not fixed—as a result of many forces, chiefly the ever-changing legislative and community mandates. Also, because of its comparative youth, the junior college has few journals devoted to it. Accordingly, there is both a thirst for, and a dearth of, carefully drawn information. Most practitioners and many others who wish to learn of the junior college movement require more than individual selected items. They want to know what significance the information has for them. They want direction as to the value of the many ephemeral pieces that are available on a subject. And, most important, they want interpretations, analyses of the major current issues that threaten to impinge on their work.

The Clearinghouse has met this need through books, monographs, topical papers, the monthly research review, and special papers when requested by professional organizations needing this service for a meeting. In these publications the staff and invited authors from many parts of the country review the literature in order to identify and analyze the "hot issues" and trends, evaluate various developments, and to bring order out of the mass of information in the ERIC system. Interpretation also takes place when staff members answer inquiries, make speeches to faculty, administrator, trustee, and lay groups. They run workshops and attend conferences, often acting as resource persons available to communicate what they have synthesized.

Through the interpretive function, the Clearinghouse staff, made up of concerned people personally involved in junior college education, has responded at the cutting edge of the major issues confronting junior colleges during the last seven years. Remedial education, teacher evaluation, student activism, Black Studies, non-traditional instruction, middle-management experiments, enrollment decline, financial crisis—these and other topics attest to the effectiveness of this three-way communication system in alerting the colleges to the emerging developments at the time they were appearing.

The response from the users cannot be gauged with precision, but when one monograph, *Salvage, Redirection or Custody?: Remedial Education in the Community Junior College*, requires two printings, and another, *Measuring Faculty Performance*, is purchased in individual copies by over 4,000 users, certain inferences can be drawn. In addition, other agencies occasionally duplicate individual items in quantity. The usefulness of the three-way street seems well established.



INFORMATION
RETRIEVAL CENTER
ON THE DISADVANTAGED

ERIC ON TV

The ERIC Information Retrieval Center on the Disadvantaged is finding new ways of communicating ideas and information through non-print media. Like other ERIC clearinghouse, ERIC/IRCD prints reviews, bibliographies, state-of-the-art, and opinion papers in series such as the *IRCD Bulletin* and the *Urban Disadvantaged Series*. Recently, however, these papers have been the subject of cable-television programs in New York City. The author, acting as host or moderator, briefly discusses the topic of the paper, followed by a discussion by invited panelists.

Some recent programs dealt with the exemplary teacher of the disadvantaged (See ED 964 442 and a soon-to-be-available paper by Adelaide Jablonsky, *There Are Some Good Teachers of the Disadvantaged*) and in-service education for teachers in desegregated schools (see ED 065 732). On another occasion, a group of community leaders discussed a soon-to-be-available paper on the historical precedents of community-centered education. Videotapes of these programs and others dealing with topics related to the work of the National Center for Research and Information on Equal Educational Opportunity, a clearinghouse closely allied with ERIC/IRCD at Teachers College, are being edited and copied to be made available to educators and, more importantly, laymen, the educational consumer, who is often neglected by the professional.



We at ERIC/IRCD have come to feel that the presentation of information through non-print media, with its potential for an openness of discussion, might very well be a way of reaching more people and with more impact than through print alone. Plans are now being made to prepare tapes and cassettes on subject topics such as the debate between David Armor and Thomas Pettigrew on the appropriateness and effectiveness of bussing as a desegregation strategy, the meaning of the Jencks' position on the limited impact of family and schooling on social (income) success, and the use or misuses of non-standard dialects in classroom teaching. Our hope is that these videotapes and audiotapes can be used in preservice or inservice training or community education, or in the many other, sometimes unpredictable, ways people use information.



COMMUNICATING WITH A DIFFUSE GROUP

Most fields of education need bridge builders between research outcome and practice, but such capable middlemen are scarce. The problem is compounded in adult education due to the diffuseness of the field. *Adult education* is an umbrella term for dozens of different kinds of special groups, discrete program areas, and institutional sponsors with one common factor: they all deal with adults.

The librarian, the home adviser, the industrial trainer, the teacher of illiterates, and the public health nurse do special kinds of work and are employed in different kinds of institutions. All such workers require training and help which enables them to meet the distinctive demands placed upon them, unlike most other professions with a common core of accepted knowledge.

Adding to the difficulty of disseminating in adult education is the large number of volunteers who constitute a majority of teachers in the field. In most instances these volunteers are unpaid, and they are not even loosely associated with any identifiable adult education organization through which they might receive even a minimum amount of contact with new developments in theory or practice.

Finally, the field of adult education is still an "emerging" field of professionalization, borrowing much material from other areas such as sociology, psychology, and anthropology.

Anyone undertaking the herculean task of trying to disseminate research findings to the practitioners in adult education must first identify what research is pertinent to adult education, then he must try to understand how the various components interface in the field, search out or invent ways and means of reaching the practitioners, and finally translate the findings into language which they will understand.

The ERIC Clearinghouse on Adult Education has tried to bridge the gap between research and practice by producing literature reviews which integrate relevant and appropriate research findings within the context of a broader perspective in adult education. For example, in a review on continuing education for the health professions, research data about continuing education is fleshed out with findings such as motivation of adult learners, sponsorship, instructional processes, finances, publicity and promotion, and supporting devices. Inclusion of these additional findings from tangential

areas give the practitioner concrete evidence of how to implement the theoretical and abstract principles.

Another example of a publication which bridges the gap is one on evaluation of programs for disadvantaged adults. This publication, which presents contemporary models of program evaluation, specifies some implications for evaluating programs for the disadvantaged adult. It tries to assist the programmer with the selection and development of program evaluation models to answer his needs.

In a diffuse field products must be tailored to special sub-groups. The number of these groups is exceptionally high in adult education. Accordingly, it takes a great variety of products to communicate with the entire group.

COUNSELING AND PERSONNEL SERVICES

"GC" IS FOR CAPS: "C" IS FOR COMMUNICATION (THOUGHT TRANSFER)

The decade of the sixties saw ever-increasing amounts of money expended on education. The personnel services received an appropriate share of this windfall. "Counseling" was a strongly emerging field, undertaking research and programs in such diverse areas as the disadvantaged, the low achiever, the underachiever, girls and women, sex education, the draft and the returning veteran, and a host of other areas of sudden—and often temporary—public interest.

Information flowed seemingly without end, with new money funding new projects almost continuously. Now, the money has slowed to a trickle, the name of the game is "accountability," and the emphasis is on programs that have proven successful. But researchers and practitioners still need to know what has been and is being done in the area of personnel services—now more than ever when they must spend their limited dollars in ways that will provide the greatest return on their investment.

What is the ERIC Clearinghouse for Counseling and Personnel Services doing to help disseminate some of the enormous treasure of information at our disposal? How are we "packaging" it so that it will be of maximum use to practitioners and researchers? In addition to a Clearinghouse newsletter, which works to keep our users aware of what's new in the field, CAPS utilizes several avenues which we think are rather unique. We have delineated a number of high-priority areas for helping professionals and have developed a series of targeted annotated bibliographies (*Searchlight*) in these areas. We are constantly in the process of updating these publications to make them continually relevant to users. Some *Searchlight* copies are: articulation, counseling for achievement motivation, program evaluation and accountability, confidentiality, vocational counseling of disadvantaged students, counseling for drug abuse, and school discipline and student rights.

CAPS has undertaken publication of a bi-monthly magazine for helping professionals (*Impact*, \$6.00 annually), which offers specific programs that can be implemented into schools at various levels, printouts of research findings in focused areas and their implications for helping professionals, free and/or low-cost materials and resources available, and articles by nationally known contributors and CAPS staff members on subjects of concern to CAPS users. In addition, *Impact* features a "Feedfore" panel of recognized authorities in the field of education and personnel services who respond to futuristic concerns in education. We feel this presentation

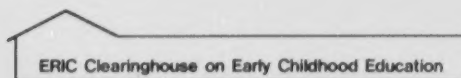
brings to our audience points of concern which open doors to thought and discussion with colleagues and students.

Communique, a companion publication, is a monthly newsletter (\$3.75 per year) targeted to school counselors and presenting techniques and practices easily incorporated into existing programs at virtually no cost, brief research findings from ERIC materials as well as other journals and abstracts together with their implications for counselors, and items of general interest to the counseling profession.

CAPS maintains an extensive liaison with state boards of education as well as state branches of national personnel associations, and with selected field associates in every state in the union, with a view toward providing effective linkage with practitioners through local dissemination of CAPS news releases and information. In return, these sources work to keep us informed of activities at their own levels of function which may be of interest to us. Their readership becomes aware of CAPS not only as an information generator and disseminator but also as a receiver and assimilator. CAPS thus has a wide pool of information from which to obtain prospective material for ERIC input as well as an extensive professional audience able to utilize the information generated by CAPS from its vast resources.

Because many helping persons are not in a position to subscribe to the many professional journals in the area of counseling and personnel services, CAPS plans to publish an up-to-date resource text which will provide easy access to recent findings in high-interest areas. *The Little Annual*, scheduled for spring 1973, addresses itself to specific topics of current relevancy: counselors as teachers and curriculum advisers, accountability in pupil personnel services, current practices in career development, outreach and alternative programs in counseling, testing programs, group practices, counseling women, paraprofessional training programs, updating counselor skills, and futuristic issues in the profession. Each chapter is being written by a recognized expert in the area.

There is a wealth of "raw" information and there is a need for "refined" information. At CAPS we consider ourselves the "processors"—the middleman who takes the raw product, sorts and sifts it, and in the end turns out a refined product, ready for digesting by the user. CAPS is also interested in helping people utilize the most effective practices. Through this two-step process, we feel we are best able to serve members of the helping professions.



THE PERSONAL TOUCH

At the Clearinghouse on Early Childhood Education we often find that personal contact with users is the best way to disseminate information. Whether we talk to users at conferences, workshops or here in our own resource library, the information exchange is quicker, more effective and more satisfactory than anything we can do by mail alone. Follow-up materials are dispatched rapidly and telephone contact can later be used to find out how useful these materials proved to be.

Personal contact enhances feedback as well. Although we have a steadily increasing mailing list for our *Newsletter* and a large group of publications to offer, we still need information from users on subject and kinds of materials wanted. The

questions asked by people in the field of early childhood education give us valuable information. We learn what materials need to be prepared, what topics are current, whom to contact for information.

Other than face-to-face contact, the best way to communicate with users is via the telephone. On the basis of this two-way information exchange we are able to enhance our ability to respond appropriately. The users who receive special service are more likely to think of mentioning the ERIC system in their own bibliographies and articles and to think of our Clearinghouse when they are preparing new papers on early childhood. In this way, the acquisitions department benefits, which, in turn, completes the communications circle.

Our strength as an information base is dependent upon the input of quality documents to the system, and we constantly try to expand our list of ERIC contributors. Personal contact is the most effective way to attract new contributors. We distribute our acquisitions brochure during conferences, when it is possible to reach a large number of people at one time, but we rely heavily upon telephone contacts and correspondence with individual researchers. The results of this process are twofold: we encourage users familiar with ERIC products to contribute documents and encourage contributors to use the services and information tools of the ERIC system. We also communicate with our user-contributor audience through use of appropriate brochures.

We have found that regional and national newsletters and journals are among our most valuable communications assets. From them we learn about new research projects and increase our list of potential contacts. In return (through no effort on our part) other readers scan the same group of newsletters and pick up information about ERIC/ECE taken from our own *Newsletter*. As a result, our visibility is increased within the educational community.

In summary, communicating is a continuous process which we are constantly trying to improve. Recent contacts with state and local visitors have been informative to all concerned. Increased use of computer searches of the ERIC Tapes and increased numbers of requests for materials to be exhibited at conferences are positive signs that our communication procedures are working. We anticipate development of better information-dissemination techniques to give better services to the early-childhood community.



HIGHER EDUCATION

INFORMATION ANALYSIS PRODUCTS AID DECISION MAKING

The various levels of input to the ERIC network create an information flow, a process discerned by the Clearinghouse on Higher Education.

As depicted in the accompanying figure, the foundation of higher education as a social institution is contained in the philosophies, values, norms, and patterns of behavior that have led to different practices within different institutions. Whether an institution is involved with traditional or innovative practices, the rationale behind the activity is based on certain beliefs.

As an institution works to fulfill its basic philosophic goals and objectives, groups of individuals, or *questioners*, constant-

ly examine the workings of the system as a whole. The questioners may be social critics and philosophers, pure researchers, applied researchers, or a combination of the three. Through their various tools, observations, and methodologies they examine the performance factors and communicate their observations in their writings.

The *communicator* is any means the questioners use to transmit their observations and research findings to those in positions to use them as a basis for decisions or action. The communicators consist of essays, speeches, research reports, books, and journals that as a collective entity provide a rationale for decision making. Decision makers may be involved with all aspects of education and are not necessarily confined to administrators.

The crux of the communication problem is to make these communicators available to individuals who need to use this information for rational decisionmaking. However, within this process there are obstacles to the smooth flow of information. Lack of knowledge about what information is available, lack of accessibility to information, and lack of time to utilize the information are a few of the blocking points.

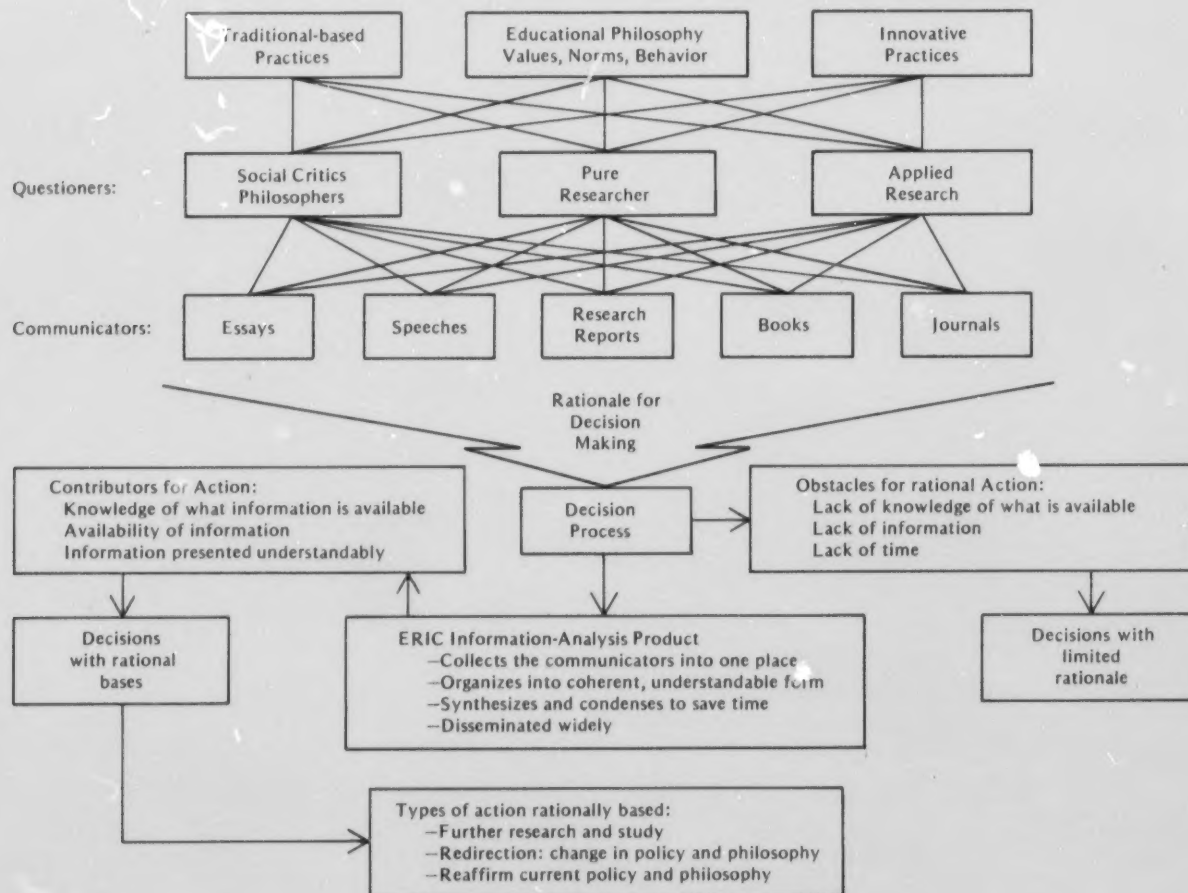
By collecting, indexing, and disseminating research on education, as well as by publishing information analysis products, the ERIC network helps to overcome these obstacles to rational decision making. The information-analysis products serve several major functions that greatly aid in establishing a strong, rational foundation for good decisions. Through these products, the various communicators are collected, organized into coherent, understandable form, synthesized, condensed, and tailored to fit the needs of a targeted clientele. Finally,

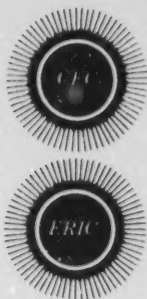
these information-analysis products are disseminated to the educational community.

The ERIC information-analysis products establish a basis for the three major contributors to action. First, the Clearinghouse helps individuals to an awareness of what information is available; second, through synthesized products, the Clearinghouse makes this information available to individuals; and, third, this information is presented in an understandable format that aids the individual in forming a rational base upon which to reach a decision.

The ERIC Clearinghouse on Higher Education has structured its information-analysis products on this elementary concept of communication and decision making. In choosing its topics and its style of presentation, the Clearinghouse has kept in mind the needs of its clientele in higher education. Faculty and students want to know what the critical issues are; the administrator wants to know what the problems and the solutions are; and the researcher wants to know what areas need further investigation.

For these reasons, the ERIC Clearinghouse on Higher Education, in cooperation with the American Association for Higher Education, has developed a series of state-of-the-art papers. Examples of papers commissioned or written by the ERIC/Higher Education staff include *Accountability in Higher Education*, *Collective Bargaining on Campus*, *State Aid to Private Education*, and our more recent monograph on master's degree programs. Through these reports a more effective flow in the communication and decision-making process has been achieved.





EXCEPTIONAL CHILDREN

ON GRAPEVINES, INVISIBLE COLLEGES, AND SOME VERY SPECIAL PRODUCTS

A couple of years ago (1970) the ERIC Clearinghouse on Exceptional Children was instructed by the Office of Education to conduct a comprehensive and systematic planning effort to determine appropriate publications and products for grant support in the next budget year. Guidelines suggested that a Clearinghouse identify research trends in its particular field, identify significant research areas to be analyzed, and determine priority research areas for product development.

To ascertain significant research activities and trends in special education, we looked at some of the usual sources for information. Appropriate computerized information files were searched and recent journal literature analyzed. Professional organizations and CEC Divisions were invited to identify topics of significance and concern. However, our most promising endeavor was an attempt to tap into the special education "grapevine." This provided us with a current, dynamic picture of significant research activities and perceived research problems, issues, and trends. The aim was to reduce the time lag between the completion of a research report and its dissemination through professional journals by identifying and plugging into a research community's inside-information grapevine.

What exactly is an information grapevine? According to this grapevine model of communication, within a given science is a grapevine of ten to 20 people who are leaders in that particular field. The most important knowledge in that field emanates from, or at least passes through, that group of leaders. This "invisible college" of leaders can provide important, immediate data on where a field is, where it is going, and why.

A telephone survey was the mechanism we used to begin tapping into special education's grapevine. With the assistance of an Advisory Committee, a roster of 58 individuals was prepared. Participants were asked to (a) identify several projects they found interesting and significant and the names of the individuals working on them; (b) describe their own work; (c) identify the hottest controversy in the field; (d) identify any problems in technology or research methodology holding up research efforts; (e) name a creative maverick in the field; and (f) suggest people the Center should interview with similar questions.

The results of this survey served as the primary basis for the Information Center's selection of topic areas for product development. Additionally, the interviews provided the beginning of a data bank of people and projects for continuing monitoring and "grapevining."

The first Invisible College was convened in March of 1971. It was called the Invisible College on the Application of Behavioral Principles in Exceptional Child Education.

Two products came out of that conference—

- **Let's Try Doing Something Else Kind of Thing—Behavioral Principles and the Exceptional Child** synthesizes the presentations and the direction of the conference. Two chapter titles, "From Skinner to Precision Teaching: The Child Knows Best" and "Sharing a Message About Curriculum with My Teacher Friends," indicate some of the ideas that behavior-modification people bring to the education scene. (\$5.25)

- **Precision Teaching** is a 20-minute color, sound filmstrip developed for use in workshops, in methods classes, or by individuals concerned about the procedures of precision teaching. (\$20.00)

The Second Invisible College, on Early Childhood, has produced a tape cassette album consisting of a collection of five, 60-minute edited tapes of the presentations of 13 participants (\$75.00), and the newly published *Not All Little Wagons Are Red—The Exceptional Child's Early Years*, (7.75).



LANGUAGES AND LINGUISTICS

SPEAKING TO THE FOREIGN LANGUAGES

The Modern Language Association/ERIC Clearinghouse on Language and Linguistics has joined forces with the American Council on the Teaching of Foreign Languages (ACTFL) to promote a new materials acquisition project for teacher-prepared, foreign-language teaching materials.

This mutually beneficial project grew from the initial results of the Survey of Foreign Language Innovative Programs currently being conducted by ACTFL and the Far West Laboratory for Educational Research and Development. Researchers found that a significant number of foreign-language teachers, departments, and districtwide programs are involved in materials development. To increase communication and exchange in the field and to avoid duplication of effort, ACTFL sought a convenient means of identifying and disseminating these materials as a service to its membership. MLA/ERIC became the agent for the organization of the project and the disseminating of materials.

Teacher-prepared materials are seldom published or distributed outside the school system for which they are developed. The ERIC-ACTFL project is designed to increase communication between foreign-language teachers in the field by revealing well-written and valuable pedagogical materials which otherwise would be known and employed only within a very small sphere. Even if the materials are not reproduced and used in their entirety, their accessibility through ERIC will enable foreign-language instructors to keep up with the discoveries and experiments of their colleagues in other areas of the country. Hopefully, one teacher will learn from the mistakes and successes of another, and the result of the expanded communication will be the development of increasingly effective teaching materials.

The project received its initial publicity in the December 1972 issue of *Foreign Language Annals (FLA)* the official journal of ACTFL. A special announcement, signed by Warren

C. Born, Director of the Clearinghouse on Languages and Linguistics, and C. Edward Scebold, Executive Secretary of ACTFL, explained the project and requested materials or information about innovative materials development projects. The well-known Dade County (Florida) instructional materials were cited as examples. Each ensuing issue of *FLA* will carry, in the regular ERIC section, news of such projects and of newly accessioned teacher-prepared materials, as well as an order blank for EDRS. Because of *FLA*'s wide distribution (11,000), it is expected that the new journal column will function as a means of both dissemination and retrieval.

Meanwhile, Mr. Born and Mr. Scebold were working to further organize the project. A special exhibit of teacher-prepared materials was set up at the 1972 ACTFL Annual Convention in Atlanta, Georgia. Documents on display served to publicize the project and will provide MLA/ERIC with the initial materials for processing. An Advisory Committee, consisting of volunteers who represent schools, universities, and state education agencies, was recruited to assist in determining policies, procedures, and criteria, and to help give direction to the search for new, original materials. These committee members joined Mr. Born in Atlanta for an initial policy meeting.

The Advisory Committee is now working with ACTFL and the Clearinghouse to establish a review system. Twenty to 25 reviewers, at least one for each of the major language areas, will be invited to evaluate materials for pedagogical value as well as for subject matter accuracy. Their services, like those of the Advisory Committee, will be strictly on a voluntary basis.

Materials developed range from Learning Activity Packages (LAPS) to culture units, some intended as basic course content, others as supplemental. ERIC will act as the distributor both for "model" materials, to be used as a guide in developing one's own materials, and for "ready to use" materials, produced by schools or districts that receive requests for copies but cannot handle the distribution themselves.

This joint project is not the first cooperative effort of ERIC and ACTFL, but it promises to be one of the most far-reaching and effective for both organizations. ACTFL is putting the Clearinghouse in touch with important discoveries in the foreign-language field, and ERIC is performing a service for ACTFL's members, as well as for all ERIC users by making those discoveries available to a wide audience.

of time or facilities for them to learn to read. An illiterate obviously has no contact with the public school system, but if he can be drawn into the library for some community activity, he can be slowly drawn to having an interest in learning to read. The librarian can then inform the school of this new interest and supply the needed aids for teaching the illiterate.

To help librarians better serve these special audiences, the ERIC Clearinghouse on Library and Information Services commissioned seven information-analysis reports on the library and information services for special groups. The purpose of these reports is to make librarians and information scientists aware of what has been done and what needs to be done to better communicate with their specific audiences, which include not only the minority and disadvantaged groups but all who come in contact with the group in relation to media and learning. Each paper explores specific programs and aspects of the problems faced in trying to communicate with a specific group: (1) "Librarianship and Black Studies—A Natural Relationship," Jessie C. Smith (Fisk University)—history of black studies programs and library collections supporting them; (2) "Black Academic Libraries—State of Affairs and Selected Annotated Bibliography of Black Academic and Its Libraries," Casper L. Jordan (Atlanta University)—size of black academic libraries; (3) "Library/Media Services in Appalachia: An Overview," Mayrelee Newman (University of Texas, Austin)—the geographic, demographic, and sociological impact on library/media services; (4) "Library Services to American Indians," Janet Naumer (Institute of American Indian Arts)—Federal and regional school programs of library services; (5) "Library Services to Juvenile Delinquents," John Martin (American Technical Assistance Association)—how the library can influence and, perhaps, change the attitudes of youths who are involved in criminal activities; (6) "Library Services to the Mexican Americans," William Farrington (formerly, New Mexico State Library)—grade school, college, and public library programs; and (7) "Library Services to Prisoners," Marjorie Le Donne (University of California, Berkeley, Institute of Library Research)—the prison administrator's role in developing and implementing library services to prisoners. Science Associates/International, Inc. of New York will publish these reports in a book entitled, *Library and Information Services for Special Groups*, with a special introduction by J. I. Smith, Associate Director of ERIC/CLIS. The book is scheduled to be published in spring 1973.

LIBRARY AND INFORMATION SERVICES

COMMUNICATING WITH SPECIAL GROUPS

One of the challenges facing educators today is the need to communicate with the minorities and the disadvantaged. Librarians and information scientists must provide adequate resources, facilities, and services for educators to use in meeting the needs of these special groups. The librarian or information scientist does not instruct, but he does provide entry to an immense reservoir of ideas and information.

A librarian who is trying to reach American Indians, for instance, cannot expect to use the rules or, perhaps, even the books used by the librarian trying to reach middle-class, white, urban or suburban people. Minorities tend to mistrust the institutions of the middle-class majority. And, quite often, there is a high level of illiteracy among them, because of a lack

ERIC/CRESS

RURAL EDUCATION AND SMALL SCHOOLS

COMMUNICATION THROUGH THE COMPUTER

The ERIC Clearinghouse on Rural Education and Small Schools has access to the New Mexico State University computer facilities and is utilizing them to their fullest capabilities. CRESS has developed unique and extremely useful ways of using the IBM 360/65 computer and the CRESS computer terminal.

Utilizing the ERIC tapes, our programmer, Mr. Ted Laubacher, has implemented a searching device called CIFERS. This device enables CRESS to search the ERIC tapes of the *Research in Education (RIE)* and *Current Index to Journals in Education (CIJE)* using the thesaurus descriptors.

CIFERS has made it possible for the administrators, professors, teachers, and students of New Mexico State University (N.M.S.U.), as well as colleges, school districts, and organizations, to use the computer searches available through the N.M.S.U. Educational Research Center. A CIFERS search results in a computer printout containing the same information about a document found in the document resume section of the *R/E* or on the first page of each microfiche title. The average CIFERS search runs up to 250 hits and costs approximately \$10 for actual computer time, plus a \$4 setup fee.

CRESS also uses the computer to compile the five bibliographies the Clearinghouse publishes each year. The bibliography searches are conducted in the same manner as are regular CRESS searches except that the time span is narrowed by specifying beginning and end accession (ED and EJ) numbers. Only one general descriptor or term is used, for example, *American Indian*. Some care must be exercised, however—when the computer was given *Outdoor*, it promptly provided us with all documents on *Outdoor Lighting*. We now add the instruction "not outdoor lighting."

A unique feature of CRESS bibliographies is the computer-generated subject index section. All *R/E* and *C/E* entries are referenced in the index by major descriptors. Under each alphabetically listed descriptor are the ED and EJ accession numbers for documents and articles in which the specific descriptor is used. The index is generated in a four-step procedure: (1) the main program builds a data set; (2) the citations are printed—the abstracts, accession number, and availability; (3) using the data set from step 1, the descriptor field is scanned, each descriptor in the field is picked up and matched with the accession numbers for documents for which that descriptor was used; and (4) the matches are then sorted alphabetically, and the index is printed. This process took 22 seconds for a bibliography of approximately 178 entries. About 84 seconds of computer time was spent on compiling the entire bibliography. Thus, the computer, for very little expense, makes the bibliographies a far more useful research tool and aids CRESS in communicating what has happened in education to the administrators, practitioners, and research personnel to whom this information is so important.

Along with literature searches and bibliographies, the computer generates contributor listings. Information concerning a contributor is programmed on a listing; then, by scanning the lists, a determination can be made concerning the recency and value of contributions. This process enables the acquisitions specialist to remind contributors that CRESS has not heard from them for some time, that a second report is expected, and so on.

The value of our computer facilities is measured through the requests we receive for our annotated, indexed bibliographies, our computer searches, and our report data. These requests are made by students, teachers, counselors, educational administrators, professional organizations, and other interested people.

After receiving our materials the users remain in contact with CRESS to keep up to date within their areas of interests. Consequently, some of the users become contributors and reference sources.

Through the New Mexico State University computer facilities and with staff cooperation, CRESS is implementing new programs which will help the Clearinghouse to contribute to communication in utilizing the ERIC network.



SOCIAL STUDIES/
SOCIAL SCIENCE
EDUCATION

LOOKING AT

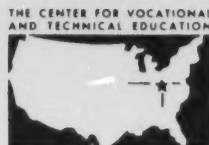
Beginning with the tenth issue of *Keeping Up*, our regular newsletter, the ERIC Clearinghouse on Social Studies and Social Science Education will introduce *Looking At*. *Looking At* will be a newsletter within a newsletter, covering a selected topic of educational interest from the social studies.

The purpose of *Looking At* is to let you know that we know about an emerging topic of interest or current concern to elementary and secondary social studies and social education teachers. In the process of doing Clearinghouse work we get around, talk with many people throughout the country, have many visitors, and receive many letters and telephone calls for information about who is doing what, and what is the latest activity on a topic. We hope to make available information about practice, people, materials, and ideas on a topic as we receive it, before enough theory, practice, or materials have crystallized or surfaced to warrant a practical guidance paper.

The first issue of *Looking At* focuses on future studies, featuring an interview with Paul D. Hurd, Chairman of the Human Values Curriculum Study Project for the middle schools being developed under National Science Foundation funding by the Biological Sciences Curriculum Study, Boulder, Colorado. Hurd has been concerned with the concept of future studies since the 1930s and his early work in the Progressive Education Association.

In addition to the Hurd interview, the first issue lists several ERIC publications and their annotations, along with 17 other items of general interest to the social education community. Some highlights: (1) "Present Law of the Sea and Its Evolution," a six-page mimeo in non-technical language by the U.S. Commission for the ocean; (2) *Future Studies* at the graduate level, an abstract of Miller and Hunt's curriculum development project on future studies; (3) *Learning To Be*, a report by a UNESCO commission reviewing major trends and developing strategies for educational change; (4) an in-service seminar on technology and society; (5) *Futures Conditional*, a new "participation trend letter to create a more human future"; (6) the *World Future Society Bulletin*; (7) *Footnotes to the Future*, a newsletter published by Futuremics, a consulting firm and association of professionals committed to "helping individuals, groups, and organizations meet and solve problems which have a direct bearing on the future"; and (8) a blurb discussing the name change of the World Law Fund to the Institute for World Order. The first issue also reviews Mary Jane Dunstan and Patricia W. Garlan's book *Worlds in the Making: Probes for Students of the Future* (Prentice-Hall, 1970). *Looking At* Number 1 was prepared by James Oswald, Intercultural Studies Project, American Universities Field Staff; Violet Wagener, ERIC/ChESS; and Stephen Danielski, ERIC/ChESS.

In addition to providing timely information, *Looking At* is also a catalyst increasing communication from users to the Clearinghouse. We hope ERIC users will feel free to contact ChESS with information and feedback on future studies projects and other topics they would like to see covered by *Looking At*. Please send us descriptions of your work, announcements, questions, syllabi, guides, experimental material, and suggestions for a second *Looking At*.



STATE AGENCIES AS A COMMUNICATION LINKAGE

In order to communicate effectively, an information system must move contacts and services as close to users as possible. Increasing demand for information by educators emphasizes the important role of state information-dissemination agencies in providing the interpersonal linkage between information collections and users. It is important that educators have access to their state information agency and are aware of the services it can provide.

State Research Coordinating Units for Vocational and Technical Education (RCUs) and the ERIC Clearinghouse on Vocational and Technical Education have cooperated in providing ERIC users with access to both general and specific types of information to solve their problems. Personnel at the Clearinghouse have solicited the assistance of RCUs or other state information-dissemination agencies in responding to requests that require one or more of the following: in-depth follow-up to formulate a search strategy, information on availability of data not readily identifiable through ERIC, information on accessibility to state and local collections of ERIC microfiche and duplication services.

In order to make the referral of requests to state information agencies more useful, a telephone survey of agencies was conducted during October and November 1972 to ascertain the information services provided by these agencies. The results of this telephone survey, along with a listing by state of computer software installations and ERIC microfiche collections, were compiled to form a *Guide to State Information Resources*. The *Guide* is intended for use by user services personnel in referring to specific information resources in a given state. When this procedure is followed, only the profile for a single state is used. State information-dissemination personnel can use the compilation of profiles for comparison purposes and to gain insight into the different approaches taken by various states in providing information services to users. These agencies can also disseminate copies of their state's profile to information requesters within their state.

The survey solicited data regarding the comprehensiveness of each agency's ERIC microfiche collection, whether or not manual and/or computer searches of the ERIC document base were provided, and the accessibility to the public of each agency's library collection.

This *Guide* will be available through the ERIC system (see VT 018 687, May 1973 *Research in Education*).



TESTS, MEASUREMENTS, AND EVALUATION
COMMUNICATING INFORMATION GENERATED
AT LARGE ANNUAL MEETINGS

The annual meeting of a large group of people with common interests was designed originally to allow these practitioners to communicate with one another. A standard

format arose. People assembled, read papers to each other, and otherwise communicated their common interests.

But there are problems with this format. Attendance at the presentation session is not always possible: some individuals cannot attend the meeting, let alone the session; sometimes there are conflicting sessions of interest; other reasons may also prevent attendance. Waiting for publication in a journal is often frustrating: it may be months (or years) before it appears; most papers never appear in published form; the presentation may appear in any one of a large number of journals, some of which are difficult to locate and are not indexed in standard references.

Two studies reported in the *American Educational Research Journal* and the *Educational Researcher* have described these dissemination problems. One of these studies suggested that the ERIC system might be of assistance. Accordingly, at the 1971 and 1972 annual meetings of AERA, the ERIC Clearinghouse on Tests, Measurement, and Evaluation engaged in a number of activities designed to improve the dissemination of information generated by the presentations.

At the 1971 meeting, ERIC/TM accepted responsibility for collecting copies of the presentations for the paper duplicating service. By early and repeated solicitations from authors, 705 (57 percent) of the 1,229 presentations were made available. An equally successful operation was conducted at the 1972 meeting: 735 (55 percent) of the 1,342 presentations were available at the time of the meeting. In contrast, at the 1970 meeting, only 150-200 (13-18 percent) of the 1,132 presentations were available through this service.

ERIC/TM was also instrumental in increasing the number of presentations reported in *Research in Education (RIE)*, the monthly abstract service of the ERIC system, and made available in microfiche and hard-copy form through the ERIC Document Reproduction Service (EDRS). Prior to the 1971 meeting, there was no systematic effort to collect AERA presentations and to announce their availability in *RIE*. For example, only 70 of the 1,132 presentations at the 1970 AERA meeting were in *RIE* six months after the event. However, at the 1971 meeting, ERIC/TM collected 705 of the presentations, selected those appropriate for its own processing, and distributed the balance to the other ERIC Clearinghouses. Within six months, about 36 percent of all presentations or 57 percent of those collected had appeared in *RIE* and were available through EDRS. A similar record of performance is anticipated for presentations associated with the 1972 AERA meeting.

Thematic summaries of the 1971 presentations in the area of tests, measurements, and evaluation were prepared by ERIC/TM. Most of the papers retained by ERIC/TM were divided into five broad categories: innovations in measurement, evaluation, educational statistics, test development, and criterion-referenced measurement. Authors were commissioned to provide brief summaries of the papers in each area. Similar thematic summaries of the 1972 papers were prepared and distributed.

Finally, ERIC/TM produced audio cassette tapes of the major addresses at both the 1971 and the 1972 AERA meetings. Master tapes of 23 major addresses given at the 1971 meeting were prepared and turned over to AERA for distribution. By September 1971 AERA had sold 1,669 copies of these tapes. In 1972, 15 master tapes of major addresses were submitted to AERA for distribution; sales figures for these tapes are not yet available.

While the efforts of ERIC/TM by no means solve all the problems of communication at the annual AERA meetings, they do succeed in reducing considerably the time gap between presentation of information and availability of materials. Furthermore, improvement of the paper-duplicating service, rapid availability through the ERIC facilities, the preparation of thematic summaries and audio tapes of major addresses contribute significantly to making this information "readily available."



WASHINGTON REPORT

THE EDUCATIONAL EXTENSION PROGRAM —AN OVERVIEW

The Office of Education made the national education extension program a reality by incorporating it into the budget for fiscal year 1973. In theory, the program implements the linkage concept described by Havelock (1969); in design and practice it is based on the experience of the Department of Agriculture extension program, the Research Utilization Specialists of the Social and Rehabilitative Service, and the technical assistance programs of the Department of Commerce and the Office of Economic Opportunity. Apart from the antecedents available to the mechanism, the extension agent's role has benefited from the experience of various precursors within the field of education itself: subject specialists, the rural county supervisor, and developers and innovators engaged in programs supported by the Elementary and Secondary Act of 1965.

In spite of the precedents they provided, however, none of these service models was specifically applicable to the educational extension program. They did not seek to serve the same clientele in the same way (interpersonal linkage to information resources). Consequently, three Pilot State Dissemination Projects (in Oregon, South Carolina, and Utah) were established in June 1970 in order to test the practical applications of the program's specialized framework. Each pilot was geared toward developing three functions:

- 1) a state management apparatus that would not only direct the service but also represent the dissemination function in the state's agency administration and act as liaison with other state and national programs;
- 2) an operation that would develop information resources and provide the services required by the clientele;
- 3) an educational extension service through agents who would work full time in local school districts in order to help practitioners identify needs that could be met by information/dissemination services. In addition, agents

would contact the center for the resources required and provide assistance in the utilization of the information as part of their followthrough responsibility.

One year later this original pilot model was varied in six more states and five school districts. Each of the state projects took a slightly different tack in providing interpersonal linkage; some worked through concurrently developing teacher centers, others retrained staff of school systems or intermediate service units so that they could include the linkage functions in their activities. At the same time, the local projects represented an alternative to the state-linkage approach and were able to implement some variation of the extension agent function. For example, while one district developed a network of librarians, another brought about information-brokering through a consortium of school systems.

All of these efforts have been at least modestly successful. Sieber's (1972) evaluation of the pilot state program provides a substantial amount of information about the effectiveness of various aspects of the program's processes, but a national evaluation of the variation models has not as yet been undertaken. Because the services offered by the local projects seem to be no different from their state agency counterparts, development of additional local project models in the near future seems unlikely. Obviously, 50 successful state projects could extend service throughout the educational community. On the other hand, similar service through local agencies would require many times as many projects and several times as much money.

Leasco's ERIC FACILITY ACQUISITIONS PROGRAM: CHARGE AND RESPONSE

Realizing that many organizations producing significant educational publications were not adequately represented in the ERIC data base, Central ERIC asked the Leasco ERIC Facility to institute a positive acquisitions program for the network. In May 1971, Murray L. Howder joined the Facility staff as Acquisitions Librarian to launch the centralized acquisitions effort. The program provides for systematic acquisition from agencies identified as having active education or training programs and, at the same time, discourages multiple (often counterproductive) solicitations of the same agency by several ERIC components.

The guiding philosophy behind the program is to increase the flow of documents (particularly federal documents) being screened for announcement in *R/E* and disseminated through ERIC. The initial phase of the program consisted of a review of Central ERIC and individual Clearinghouse acquisitions arrangements with government agencies. Based on the findings of the study, a concerted effort was undertaken to renew agreements where the figures showed it was needed and to consummate new agreements where none had previously existed. Nearly 50 different agencies are now automatically sending documents to the ERIC Facility.

On June 30, the ERIC Facility Acquisitions Program completed its first full year of operation.

The grand total of documents acquired by the Facility in FY '72 is about double the number received in FY '71. Expressed in quantities, in FY '71, the Facility handled 3,713 documents from all sources, compared to 7,446 documents acquired from all sources in FY '72; the Facility through the Acquisitions Program was able to bring 3,733 more documents

into the system than it sent to the Clearinghouses in the year before the program was begun. Many of these documents were specifically selected for their relevance or quality of information, rather than being passively acquired with no prior selection. Therefore, it can be seen that the Facility Acquisitions Program has added qualitatively to the flow of documents coming into the system.

Federal documents have been acquired by requesting specific titles or categories of reports and through various automatic arrangements set up with 40 agencies and offices. More such arrangements will be concluded as officials are identified who maintain mailing lists or who are willing to put the Facility on automatic distribution. Unfortunately, the publication-dissemination routine varies widely from agency to agency and within some agencies. *In some cases no provision at all is made for automatic dissemination*, so that the necessary alternative of learning of specific documents and requesting them individually will have to be continued.

In addition to arrangements with federal agencies, automatic arrangements have been concluded with an inter-governmental organization (OECD), one local U.S. school district (Dade County, FL.), and one Canadian city school system (Toronto). The Facility has received a number of UNESCO non-sales documents, which are normally not available to persons outside the organization, through Unipub, Inc., its U.S. agent. Many of the documents in the international organizations, local jurisdictions, and foreign categories were acquired through these arrangements. Unipub has also set up an education interest profile for the Facility, which provides for automatic shipment of sales publication from UNESCO and other international organizations on an approval basis. Through the courtesy of the UN Library, relevant, fugitive, and non-sales documents announced in the United Nations Documents Index are supplied on demand.

While the number of documents acquired from state governments was identical in FY '71 and FY '72, the composition was somewhat different. In the last year, a number of documents was received from the District of Columbia Schools as a result of a Facility Agreement; virtually all the other documents in the state governments category were sent by the New York State Department of Education, including a few from the neighboring states of Maine and Massachusetts. A survey of state documents announced in *R/E* in 1971 reveals that the ERIC data base is very incomplete in coverage of documents from the state departments of education. The ERIC Facility will, however, make no active acquisitions arrangements with state governments unless directed to do so by Central ERIC.

In FY '72 the documents from nonprofit organizations include 425 AERA conference papers and a few documents acquired from the National Education Association. Reflected separately under NEA is the start of revived NEA input, and indications are that the flow of documents from NEA will continue to improve. As a matter of fact, the Facility has acquired those back publications from Central NEA which are still available from stock. The Facility is proceeding to contact the NEA affiliates which are handling their own publications in order to reinstitute the arrangements for their automatic input to ERIC.

In conclusion, the first year of the Facility Acquisitions Program generated a substantial increase in documents acquired. More acquisitions contacts remain to be made, and certain arrangements need to be reconfirmed. Coverage, especially of federal documents, is now more complete than it was previously, but comprehensiveness is yet to be achieved.

PUBLISHERS ALERT SERVICE (PAS)

PAS is a component of what was until recently the U.S. Office of Education Copyright Program. Although the Copyright Program, together with PAS, was transferred to the newly established National Institute of Education, both agencies continue to be serviced. The Copyright Program is a managed operation under which appropriate products of development, resulting from agency grants and contracts, are published commercially under copy right.

PAS is essentially an announcement service by which the publishing and marketing industry is informed of products of development which are ready, or are being readied, for commercial publication. Upon seeing the announcements, any interested publisher may obtain a Request for Proposals from the product developer (grantee or contractor) and submit a proposal to publish. The best proposal, of course, is selected. The outcome is a publication agreement between the publisher and the product developer by which the publisher may market the product on an exclusive basis for a period of five years. Copyright royalties are shared equally by the product developer and the U.S. government.

PAS became operational in May 1972 with the award of a contract to System Development Corporation for the preparation of PAS announcements. As of the end of November ten announcements had been prepared and distributed. The announcements are as follows:

DEVELOPER	MATERIAL
University of Texas	ADALANTE: An Emerging Design for Mexican American Education
University of Pittsburgh	The Preceptual Skills Curriculum
New York Institute of Technology	Self-Paced Physics Course
National Education Association	Project LIFE
University of Wisconsin	The Prereading Skills Program
New York University	COPES Conceptually Oriented Program in Elementary Science
American Institutes for Research	A Technology for Developing Instructional Materials
Teaching Research Oregon State System of Higher Ed.	<i>Feather</i> (a film)
Ohio University	AFRICA: A Thematic Geography
SWRL Educational Research and Development	SWRL Communications Skills Program

COOPERATIVE PUBLISHING: SOMEONE TO HELP SHOULDER THE LOAD

The most powerful "wonder drug" does little good unless it reaches the victims of disease. Similarly, food only relieves hunger if people are able to eat it. Research information, in the same way, is pointless unless it gets to the people who can put the information to use.

Recognizing this "fact of life," the Clearinghouse on Educational Management (ERIC/CEM) makes effective dissemination of its products a high priority. Considerable time and energy are spent devising efficient ways of getting the publications from the Clearinghouse, at the University of Oregon, to where they will do the most good. One such method is the cooperative publishing arrangement.

This process is best defined by example. A series of collections of ERIC document resumes are being published cooperatively by the Clearinghouse and the American Association of School Administrators (AASA). Thus far twenty-four of these AASA-ERIC Abstracts have been issued.

Details of the project were negotiated, and the areas of responsibility were divided. ERIC/CEM took the responsibility of compiling and editing the series. As part of this task, the Clearinghouse prepares the camera-ready copy. AASA is responsible for the actual publication and distribution of the abstracts.

Through cooperative publishing arrangements with other organizations, books, monographs, topical papers, and journal columns have been developed as the final products of such joint projects. When they are requested by professional organizations, special papers are also prepared for use at meetings, conventions, and the like.

A major advantage lies in the improved dissemination such a project affords. By making use of the partner organization's existing informational devices, such as newsletters, the Clearinghouse is given access to the large membership of the organization. Through such devices, the members are familiarized with both organizations and the products of each. Identification with the product by both sponsoring groups further enhances this effect. Consequently, the Clearinghouse is identified as a rich, potential source of research information for the members of the other organization.

A cooperative publishing arrangement also provides advantages from the standpoint of economy, by eliminating the necessity of either partner having to "shoulder the load" alone. The Clearinghouse, for example, is able to focus on commissioning authors and editing, eliminating publishing and distribution costs. The other partner, in turn, can charge a price to recoup expenses for the publishing and distribution.

The extent of such arrangements, so far, has been considerable. In addition to the AASA-ERIC Abstracts series, numerous "state-of-the-knowledge" papers have been or are being prepared through various cooperative publishing arrangements. Five such papers, combined in a monograph titled *Social and Technological Change: Implications for Education*, were published with the Center for Advanced Study of Educational Administration (CASEA). Papers 8 through 12, a special series on student control and student rights, were commissioned by the Clearinghouse and published by the National Organization on Legal Problems of Education (NOLPE).

Further in the state-of-the-knowledge papers, a series on administrator preparation is being produced jointly by the Clearinghouse and the University Council for Educational Administration (UCEA). The Clearinghouse and NOLPE are also cooperatively producing eight papers in a special series on

the legal aspects of school administration.

One of the most recent cooperative products is an analysis and bibliography entitled *Communicating with the Public*. The paper was prepared by the Clearinghouse and published by the National School Public Relations Association.

Consistently, the results of these cooperative projects have been satisfying to both partners, as well as being useful to interested third parties. Because of what is regarded as a high level of success, the procedure is destined for future expansion.

As effective, efficient dissemination of research information continues to rank as a primary consideration at ERIC/CEM, the Clearinghouse will continue to seek still better ways of serving the public by meeting its informational needs.

USERS SPEAK OUT/ LETTERS & COMMENTS

Clearinghouse staff members frequently discuss ERIC products and services with students, faculty, administrators, and their potential users. This letter notes the service provided to a university language department.

Dr. William David Schaefer
Executive Secretary
Modern Language Association of America
62 Fifth Avenue
New York, New York 10011

Dear Dr. Schaefer:

Recently Mrs. Dolly D. Svobodny of the MLA/ERIC Clearinghouse on Languages and Linguistics was here at our campus. On two separate days she gave demonstrations of ERIC which included filmstrip-lectures, explanations, sample searches, and displays of a wide variety of ERIC materials, and did an excellent job of public relations among both students and faculty members who attended the various sessions she presented in our student union building. Several language methodology classes profited from her presentations, along with library students and a number of the curious who saw the write-up in the paper.

From our point of view, as language department faculty members for whom the emphasis is on teaching, this type of effort on the part of ERIC and/or the MLA can be very rewarding indeed. Until Mrs. Svobodny's visit, few knew of ERIC. Now, most of those who should know do, and have a good idea of its value as a research tool. Five or six of our faculty members and some students also journeyed to Salt Lake City to see the demonstration of the computer bank given by Mrs. Svobodny and Mr. Mark Radwin of the

Information Scientist's Laboratory in Palo Alto. This type of presentation was valuable to us. We were very much impressed and are grateful for it.

Sincerely,

J. Dale Miller

Associate Professor of French
Brigham Young University
Provo, Utah

This letter, received by the ERIC Clearinghouse for Media and Technology, describes the use of ERIC materials as stimulated by a PACE center. Several other agencies also serve as focal points to link educators with the ERIC system.

November 8, 1972

Miss Maxine Sitts
ERIC Clearinghouse
Institute for Communication Research
Stanford University
Stanford CA 94305

Dear Miss Sitts:

Comments concerning use of ERIC materials through motivation supplied by a regional planning office:

Results:

1. The educators who are using the service are very enthusiastic and are impressed by the planning assistance provided by ERIC materials.
2. Percentagewise, the service is used more by administrators and educational consultants than by teachers. Librarians seem to be especially interested in the service. Since September 20, 1972, 51 teachers or librarians have initiated searches and 41 administrators or educational consultants.
3. Searches cover such topics as:
Early childhood learning, motivation of American-Indian children, new reading programs, curriculum development, extracurricular activities, student contracts, student grouping, relationship between reading and listening.

Constraints

1. Major problem is getting the word out to *all* educators. This is especially true in the larger school districts.
2. Effectiveness of service use is difficult to evaluate.

Uniqueness of Approach:

1. The Center has had good success in relating use of the ERIC service to program planning. Typically a district contacts the Center, discusses a problem and then requests aid in implementing a solution. To get them to recycle and focus on various alternatives, the ERIC search becomes an excellent tool.

Sincerely,

B. Keith Rose, Executive Director
Program Development Center
of Northern California
Mailing Address: Building U, Chico State College
Office: 173 E. Third Avenue
Chico, California 95926
(916) 342-1838

Communication is enhanced through rapid turnaround. Clearinghouses attempt to respond quickly to telephone requests.

October 10, 1972

Mr. Stuart Smith
Assistant Director and Editor
ERIC Clearinghouse on Educational Administration
University of Oregon
Eugene, Oregon 97403

Dear Mr. Smith,

Following a telephone request, I received the materials you so kindly had reproduced for me.

First, thank you for accepting a telephone request. Second, thank you for having sent the information that I needed so quickly.

What a service you perform! May your function endure a long, long time. I am most appreciative of the help I have received.

Have a happy day,

(Mrs.) Dorothy Tillinghast
Principal

Melrose Avenue Elementary School
731 North Detroit Street
Los Angeles, California 90046

Clearinghouses often provide information beyond that which is contained in ERIC files. Here a Clearinghouse has helped with finding names of women suitable for consideration for fellowships.

September 12, 1972

Dr. Lora Robinson
Editor, *ERIC Higher Education*
Educational Research Information Center
One Dupont Circle
Washington, D. C. 20036

Dear Dr. Robinson:

On behalf of the President's Commission on White House Fellows, I want to take time to thank you sincerely for your generous assistance to Ms. Carol Currie Gidley of our staff in her recent effort to strengthen our recruitment of women for competition in the 1973-74 Fellowships.

I understand that you gave Ms. Gidley an initial list of some 58 key women, and later followed that list up with several supplemental lists. This is a most valuable contribution on your part, and I thank you for it.

We are confident that we will have significantly greater success in the search for more women for the Fellowship competition next year. You have a share in this improved response, and we want you to know how much we appreciate it.

Sincerely,

Arthur E. Dewey
Director
President's Commission on White House Fellows
The White House

The call for contributions to the first issue of the ERIC REPORT suggested, among other things, that the Clearinghouses "elaborate on any idea that might be unique." The system that ERIC/RCS has developed for evaluating documents in the language arts is, to the best

of our knowledge, unique. And the following disquisition on this essential step between acquiring and disseminating information is, certainly, an elaboration.

THE INSPECTOR GENERAL

—"Now I know how the system works,
Its ins and outs and kinks and quirks.
What I want to find out while I'm here
Is what you do that's new. That clear?"

—"Then I'll not waste time on old routine,
Nor explain what ERIC and Thesaurus mean;
I'll describe one way that ERIC/RCS
Does things a little different than the rest.
(I'll try to sustain this riming conversation
While discussing our system of evaluation,
But the meter will suffer, and that's guaranteed,
When iambs aren't suited to expository need.)"

—"Get to the point. I've got to catch a plane."

—"Yes sir, of course, sir. I'll rapidly explain
That this Clearinghouse has for several years
Sent its documents to juries of the authors' peers,
So that each decision to abstract it or can it
Is made by an expert who is able to scan it
And then it and tell us wherefore and why
The paper in question should live or should die."

—"Ah ha! A moment. Let me write this down.
These high-priced readers (on whom I must frown),
For reading each document receive just what fee?"

—"No cost."

—"No way!"

—"Courtesy of CEE,
IRA, and SCA."

—"I have got no time for play.
We all know nobody works without pay,
Or does expert evaluation gratis.
And IRA—I know what that is!

—"International Reading, sir, Association."

—"A likely story! SCA?"

—"Speech Communication
Association. And CEE, sir, in clarification,
Is the Conference on English Education."

—"The IRA and the English! And they work for free?
This is some line of stuff you're selling me!"

—"Please, now, don't get perplexed or nervous—
The evaluations are done as professional service.
ERIC/RCS, you see, works in close cooperation
With leaders in each special organization
To choose member experts who cover the range
—Familiar, exotic, common, and strange—
Of topics of interest in the organization,
And who represent all parts of the nation.



We assign the documents that we receive
To scholars we have reason to believe
Will not only be well qualified to judge
Whether a document's golden or fudge,
But who will be happy for having the chance
To read books and papers that will enhance
Their knowledge in their own special field.
This chance, in fact, is what has appealed
To a great many people whom we have asked
(Reading what's interesting's not a hard task)."

—"All that you pay, then for the service is postage?"

—"Right, sir, though we've found that most age-
encies find it, as you did, hard to believe
That from these committees ERIC/RCS can receive,
Within a week, or two at the most,
Detailed reviews and recommendations,
From busy scholars, for no compensation."

—"Then why can't everyone get the same done for free?"

—"I'm all out of rimes, sir, and you're late, I see."

James Hoetker
Associate Director, ERIC/RCS

NEW PRODUCTS AND SERVICES

The following products and services are available from the clearinghouses under which they are listed or as otherwise noted. Clearinghouse addresses may be found on the inside back cover.

ADULT EDUCATION

Toward Gog and Magog Or?: A Critical Review of the Literature of Adult Group Discussion, by Franklin W. W. Osinski, John Ohliger and Colleen McCarthy.

A review of the research on group discussion as used in adult education.

Library of Continuing Education, 107 Roney Lane, Syracuse, New York 13210, \$3.00.

Paulo Freire: A Revolutionary Dilemma for the Adult Educator, edited by Stanley M. Grabowski.

A compilation of six essays presenting different perceptions of Freire's philosophical assumptions as they relate to adult education.

Library of Continuing Education, 107 Roney Lane, Syracuse, New York 13210, \$4.00.

Motivational Patterns of Adult Participants in Independent Study Programs, by Stanley M. Grabowski.

Research results summarized regarding motivational factors of adults in a directed self-study bachelor's degree program.

Single copies free on request from the Clearinghouse.

Consumer Education Programming in Continuing Education, by Margaret Charters.

Syracuse University Publications in Continuing Education, 105 Roney Lane, Syracuse, New York 13210, \$1.75.

COUNSELING AND PERSONNEL SERVICES

The Legal Rights of Secondary School Children (Charged with an Act of Delinquency or Violation of School Laws), by Paul Piersma.

In response to the need of school personnel to learn more about school rules in relation to civil laws, statutes, and rulings, this monograph features a highly applicable student bill of rights which can help schools implement policies which will afford students more consistent treatment for offensive behavior. A comprehensive listing of legal precedents, citations, books, journal articles, and special reports is included.

From the Clearinghouse, \$3.00.

Impact—The Magazine for Innovation and Change in the Helping Professions.

Recently expanded from a quarterly to a bi-monthly publication format, it features in-depth articles on topics of current concern to members of the helping professions, resources and materials, exemplars, upcoming events, games and puzzles, futuristic professional trends, and opportunities for reader involvement.

From the Clearinghouse, \$6.00 per volume year.

Communique—The Newsletter for Practicing Counselors.

Expanded from nine to ten issues per year and from four to eight pages per issue, it features readily adoptable practices, research findings which have implications for those working with youngsters, and information and resources useful to counselors.

From the Clearinghouse, \$3.95 per volume year.

THE DISADVANTAGED

"Deschooling and the Disadvantaged: Implications of the Illich Proposal," by Gertrude S. Goldberg. *IRCD Bulletin*, Vol. VII, No. 5.

A discussion of Illich's proposals as they affect the functions of education for social change.

EDRS — ED 064 471; MF \$0.65, HC \$3.29.

Expanding Opportunities in Higher Education (issue title). *IRCD Bulletin*, Vol. VIII, No. 1.

Consists of two articles: "Some Trends and Countertrends," by Judith P. Ruchkin; and "Access to Higher Education," by Edmund W. Gordon.

Single copies free on request from the Clearinghouse.

"There are Some Good Teachers of the Disadvantaged," by Adelaide Jablonsky. *IRCD Bulletin*, Vol. VIII, No. 2.

Descriptions of the behavior of six exemplary teachers functioning in their classrooms.

Single copies free on request from the Clearinghouse.

Busing: Who's Being Taken for a Ride, by Nicolaus Mills.

A historical look at busing to show its common use to meet social and educational problems.

EDRS — ED 063 431; MF \$0.65, HC \$3.29.

Human Relations in the Classroom: An Annotated Bibliography, Supplement I, compiled by Raja Jayatilleke.

Covers items announced in *R/E* (April-December 1971) and *C/I/E* (May-December 1971).

EDRS — ED 064 417; MF \$0.65, HC \$3.29.

An Annotated Bibliography of Selected Books About American Indians, compiled by Loretta Revai.

Approximately 300 readings for elementary through high school students.

EDRS — ED 065 642; MF \$0.65, HC \$3.29.

The Exemplary Teacher of the Disadvantaged: Two Views, compiled by Adelaide Jablonsky.

Teachers and principals describe the characteristics and behavior of the exemplary teacher.

EDRS — ED 064 722; MF \$0.65, HC \$3.29.

Women: Their Educational and Career Roles: An Annotated Bibliography, compiled by Jean Barabas.

Approximately 200 citations of documents appearing in *R/E* and *C/I/E*.

Single copies free on request from the Clearinghouse.

"Title IV in the Sixties," by Erwin Flaxman and Doris Mosley. *IRCD Bulletin*, Vol. VIII, Nos. 3 and 4.

A review of past in-service desegregation workshops and some future projections.

Single copies free on request from the Clearinghouse.

"Public Service Employment: A Poorly Publicized Opportunity," by Gertrude Goldberg. *IRCD Bulletin*, Vol. VIII, Nos. 3 and 4.

An examination of an overlooked antipoverty strategy.

Single copies free on request from the Clearinghouse.

EARLY CHILDHOOD EDUCATION

Day Care: An Abstract Bibliography (Supplement No. 1), by Norma K. Howard.

References cited include family day care and care in centers, staff, equipment, standards, financing and other pertinent topics.

University of Illinois Curriculum Laboratory, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801, \$0.95.

Malnutrition, Cognitive Development and Learning, by Susan B. Thomas.

Extensive abstract bibliography cites research on malnutrition and its effects, considerations in nutrition research, and recommendations for research.

University of Illinois Curriculum Laboratory, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801, \$2.10.

Nutrition and Learning in Preschool Children, by Susan B. Thomas.

Extensive paper summarizes research findings on malnutrition and retarded physical and mental growth. Also discusses behavior and malnutrition.

University of Illinois Curriculum Laboratory, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801, \$0.45.

Perspectives on Early Childhood Education, by Lilian G. Katz.

Short paper discusses the early remedial education models, curriculum goals for the open classroom, the teacher's role, and excitement and learning.

University of Illinois Curriculum Laboratory, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801, \$0.25.

Research on Open Education: Problems and Issues, by Lilian G. Katz.

Extensive paper discusses definition of open education and examines reasons to support the informal classroom. Also presents research and development topics.

University of Illinois Curriculum Laboratory, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801, \$0.45.

EDUCATIONAL MANAGEMENT

Preparing Educational Leaders: A Review of Recent Literature, by Robin H. Farquhar and Philip K. Piele.

A broad overview of the literature on administrator preparation programs which covers the major interrelated components of such programs.

University Council for Educational Administration, 29 West Woodruff Avenue, Columbus, Ohio 43210, \$2.00 each; 2-24, \$1.80; 25 or more, \$1.60.

Unconventional Methods and Materials for Preparing Educational Administrators, by Richard Wynn.

A description of unconventional instructional methods which includes laboratory training, case methods, simulation, games, and independent study.

University Council for Educational Administration, 29 West Woodruff Avenue, Columbus, Ohio 43210, \$2.00 each; 2-24, \$1.80; 25 or more, \$1.60.

Emergent Practices in the Continuing Education of School Administrators, by Frank W. Lutz and Reynolds Ferrante.

A survey of continuing education for school administrators, as it appears both in print and in practice, which describes a proposed comprehensive process for a continuing program.

University Council for Educational Administration, 29 West Woodruff Avenue, Columbus, Ohio 43210, \$2.00 each; 2-24, \$1.80; 25 or more, \$1.60.

Training-in-Common for Educational, Public, and Business Administrators, by Edwin Miklos.

Several Canadian and American programs providing interdisciplinary administrator training are outlined, and future prospects for cross-institutional study of administration are considered.

University Council for Educational Administration, 29 West Woodruff Avenue, Columbus, Ohio 43210, \$2.00 each; 2-24, \$1.80; 25 or more, \$1.60.

Substantive Legal Aspects of Teacher Discipline, by Floyd G. Delon.

An examination of current statutory and case law regarding teacher discipline that emphasizes the changes that have taken place over the past several decades in restrictions on teacher behavior.

National Organization on Legal Problems of Education, 825 Western Avenue, Topeka, Kansas 66606, \$3.50.

Class Size, by Ian Templeton. Educational Management Review Series Number 8.

A review summarizing findings on the effect of class size on both school finance and educational quality.

Single copies free on request from the Clearinghouse.

Differentiated Staffing, by Ian Templeton. Educational Movement Review Series Number 9.

Analysis of the literature on differentiated staffing dealing with the concept, the accompanying controversy, implementation, evaluation, and problems in adoption.

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Merit Pay, by Ian Templeton. Educational Management Review Series Number 10.

A discussion of merit pay that outlines arguments for and against, identifies problems, and presents some merit-pay programs and proposals.

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Paraprofessionals, by Ian Templeton. Educational Management Review Series Number 11.

Information on the use of paraprofessionals that covers such topics as recruitment, selection, training, duties, administrative problems, and effectiveness.

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Environments for the Physically Handicapped, by Alan M. Baas. Educational Facilities Review Series Number 8.

Special architectural needs of the physically handicapped receive attention, with emphasis given to the nature of environmental interaction in the learning process.

Single copies free on request from the Clearinghouse.

Early Childhood Facilities, by Alan M. Baas. Educational Facilities Review Series Number 9.

A variety of facilities for the very young are surveyed together with the basic educational rationales relating to the plan and design of such facilities.

Single copies free on request from the Clearinghouse.

EDUCATIONAL MEDIA AND TECHNOLOGY

The Working Teacher's Personal Guide to Film Sources, compiled by Jaclyn Caselli.

This 32-page directory includes a list of selected film sources and annotated lists of further references and books about the use of film in the classroom. It is geared especially for the grammar and high school teacher.

Stanford University, School of Education, Box E, Stanford, California 94305, \$1.50. Educational discounts of 10% for over 25 copies.

Alternative Education: The Free School Movement in the United States, by Allen Graubard.

This extensive state-of-the-art paper includes sections on the free-school movement in theory and practice, the current status, types, and some predictions and resources. The final section lists books, journals, and centers of activity.

Single copies free on request from the Clearinghouse.

Renewing the Link between Communications and Educational Technology, by Keith W. Mielke.

This paper consists of a review of a small sample of some recent trends in general communication theory, literature, and application for a readership within the communities of educational technology and general education. The author states hopes that "they may stimulate a reopening of dialogue and a renewed awareness of common interests between these disciplines."

Winter 1972 issue of *AV Communication Review*, AECT, 1201 16th St., Washington, D.C. 20036. Also available from Stanford University, School of Education, Box E, Stanford, California 94305, \$1.50.

The Clearinghouse Newsletter, No. 25.

This special edition features a center pull-out section devoted to children and television. It includes a complete bibliography on children and television and reports from FCC hearings and the recent ACT (Action for Children's Television) Symposium. News of the Clearinghouse and educational media and technology in general is included.

Single copies free on request from the Clearinghouse. We welcome mailing list requests.

The Best of ERIC: Learning Resource Centers, by Mayrelee Newman.

This paper includes 50 abstracts of documents dealing with the most recent and most relevant projects involving learning resource centers and learning labs. The abstracts are broken down into General; Public School/Early Childhood; Community/Junior College; College/University; and Adult Education.

The bibliography was designed especially for learning lab coordinators, librarians, and media specialists. Most documents cited can be ordered from EDRS.

Stanford University, School of Education, Box E, Stanford, California 94305, \$1.50. Educational discounts of 10% for over 25 copies and 20% for over 50 copies.

Copyright Considerations in Educational Broadcasting, by Eugene N. Aleinikoff.

This extensive paper by the Broadcast Counsel for the Corporation for Public Broadcasting helps clarify the present status of copyright in educational broadcasting. It attempts to give the educational broadcaster some guidelines for use of copyrighted material. Mr. Aleinikoff explains the copyright laws without the dangerous oversimplification sometimes found in articles of this type.

Single copies free on request from the Clearinghouse, while the supply lasts.

So You Want To Have a Film Made: A Guide for Film Sponsors, by D. B. Jones and Stephen Longstreth.

This occasional paper deals with the relationship between the film sponsor and the filmmaker. Included is practical advice about making educational and informational films. Chapter include: Why You Shouldn't Make a Film; Why You Should Make a Film; Selecting a Producer; Setting the Budget; The Film's Approach; The Script; and The Sponsor's Role During Production. Sample scripts, a budget, and a film glossary are included.

Stanford University, School of Education, Box E, Stanford, California 94305, \$2.75. Educational discounts of 10% for over 25 copies and 20% for over 50 copies.

Education and Cable TV: A Guide to Franchising and Utilization, by Jon Shafer.

This extensive paper is three publications in one: A state-of-the-art examination of cable TV and education, an extensive annotated bibliography (including organizations), and a complete glossary of cable-television terms. The state-of-the-art section explains cable television and specifically recommends how educators can use this new technology. A reader can learn

where cable is today, and where it will be 50 years from now. Stanford University, School of Education, Box E, Stanford, California 94305, \$2.50. Discounts of 10% for over 25 copies and 20% for over 50 copies.

EXCEPTIONAL CHILDREN

Let's Try Doing Something Else Kind of Thing, edited by June B. Jordan and Lynn S. Robbins.

A report from the Invisible College Conference on the Application of Behavioral Principles in Exceptional Child Education.

CEC Publications Sales, \$5.25.

Not All Little Wagons Are Red—The Exceptional Child's Early Years, edited by June B. Jordan.

A collection of commentaries on the state-of-the-art of early childhood education.

CEC Publications Sales, \$7.75.

Precision Teaching (sound filmstrip), script content by Ann and Clay Starlin.

Provides an introduction to precision teaching and demonstrates key procedures in precision classrooms.

CEC Publications Sales, \$20.00.

Kaleidoscope—Emerging Patterns in Media, edited by Phyllis L. McDonald, Evelyn R. Blum and P. Elaine Barker.

Developed from CEC Conference on Instructional Technology stressing classroom applications, planning, and teacher training packages.

CEC Publications Sales, \$2.50.

Dimensions I, edited by June B. Jordan and Phyllis L. McDonald.

Stresses commentaries on current research activities and issues with exceptional children.

CEC Publications Sales, \$2.50.

Dimensions II, edited by Jean Nazzaro.

A needs assessment from interviews with all state directors of special education and a sampling of administrators from 40 local districts—current problems and issues are discussed.

Single copies free on request from the Clearinghouse.

Teaching Exceptional Children, edited by June B. Jordan and Thomas P. Lake.

A special issue stressing techniques and methodologies of programs from around the U.S. on Career Education.

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The Search for the Educational System That Doesn't Work, by James J. Gallagher.

Keynote address at the Frank Potter Graham Child Development Center—an analysis of the issues in special education today.

CEC Publications Sales, \$7.00.

Abstracting and Indexing Manual: Procedures of the CEC Information Center, by Karen L. Woodworth.

The manual explains abstracting and indexing styles and procedures used at the Council for Exceptional Children Information Center in preparing information for publication and entrance into the information retrieval system.

EDRS — ED 063 708; MF \$0.65, HC \$3.29.

Acquisitions and Processing Manual: Procedures of the CEC Information Center, by Renee P. Johnson and Wanda D. Carter.

The acquisitions and processing staff of the Council for Exceptional Children Information Center has prepared the manual in order to clarify and document procedures now in effect at the Center, to assist in training new personnel, and to provide a model for other information centers.

EDRS — ED 063 707; MF \$0.65, HC \$3.29.

Information Services Manual: Procedures of the CEC Information Center, by Joyce Parrish.

The manual is designed to clarify and document procedures now in effect at the Information Center of the Council for Exceptional Children, to assist in training new personnel, and to provide a model for other information centers.

EDRS — ED 063 706; MF \$0.65, HC \$6.58.

Thesaurus for Exceptional Child Education, Third Edition, by Karen Woodworth and Carol Breuer.

Distillation of the ERIC Thesaurus of Descriptors of approximately 1,500 terms that are applicable to documents concerned with exceptional children.

EDRS — ED 063 726; MF \$0.65, HC \$3.29.

HIGHER EDUCATION

A Profile of Upper Level Colleges, by Helene I. Shell.

Reviews briefly the history, development, and philosophy of colleges which offer only the junior and senior year baccalaureate programs as well as programs leading to master's and doctoral degrees. The paper also covers problems which are incurred in the development of upper-level institutions and offers five recommendations for planning new institutions.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036, \$.15 (over 10 copies \$.10 each).

A Matter of Degree: A Setting for Contemporary Master's Programs. Washington, D.C.: American Association for Higher Education.

This state-of-the-art paper explores the variety of opinions about contemporary master's programs. Presents a brief historical sketch and discusses the credentials versus standard debate relative to master's degrees.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036, \$2.00.

The Impact of the Academic Revolution on Faculty Careers, by D. W. Light, Jr., L. R. Marsden, and T. C. Corl.

Dr. Light and associates have written an in-depth review of the available research on the academic profession. What type of person enters academic profession, what are his career patterns, and how do these career patterns vary from the different types of institutions. This review is highly significant in a period of time where many faculty members are finding it increasingly difficult to pursue their chosen career.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036, \$2.00.

JUNIOR COLLEGES

A Directory of Self-Instructional Materials Used in Community Colleges, Second Edition, edited by M. Stephen Sheldon and Young Park.

This directory includes titles, subject-matter contents, and ordering information for hundreds of self-instructional packages.

UCLA Bookstore, Mail Out, 308 Westwood Plaza, Los Angeles, California 90024, \$4.50.

The Financial Crisis in the Community College, by John Lombardi.

This topical paper contains information about community college finance, surveying the causes and the extent of the financial crisis.

Single copies free on request from the Clearinghouse.

The Practitioner Views Institutional Research, by Young Park.

This is a compilation of short articles defining the scope and outlining the problems of community college institutional researchers.

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Linking Research and Practice for Community Colleges, 1966-73, compiled by Marcia Boyer and Leslie Purdy.

This paper provides a description of the purposes and functions of the Clearinghouse, including its activities and affiliations over the seven years it has been in operation.

Single copies free on request from the Clearinghouse.

LANGUAGES AND LINGUISTICS

Maintenance of the Language Laboratory, by Frank W. Medley. ERIC Focus Reports on the Teaching of Foreign Languages, Number 28.

This publication discusses aspects of the language laboratory in terms of operation, maintenance, and effective utilization as they relate to teachers, lab directors, and administrators.

MLA Publications Center, 62 Fifth Avenue, New York, N.Y. 10011, Order No. R28, \$0.50.

Leadership in Foreign Language Education: Developing the State Foreign Language Association, by Robert J. Ludwig.

Intended as a handbook for foreign language leaders, this publication discusses all aspects of the state association, including practical suggestions and specific ideas for activities.

MLA Publications Center, 62 Fifth Avenue, New York, N.Y. 10011, Order No. H132, \$2.50.

A Selective Bibliography of Doctoral Dissertations in Modern Language Education, by Charles J. James.

In addition to a listing of 842 dissertations dating from 1961 to 1971, introductory material here provide an overview of doctoral research and suggest directions for further study.

MLA Publications Center, 62 Fifth Avenue, New York, N.Y. 10011, Order No. B66, \$2.00.

ERIC Documents on the Teaching of Foreign Languages: List Number 9, by Carolyn Monka.

This is a bibliography of all ERIC documents relevant to foreign language education appearing in *R/E* from November 1971 to April 1972.

Single copies free on request from the Clearinghouse. Also published in *Foreign Language Annals* 6 (Oct. 1972), 123-43.

LIBRARY AND INFORMATION SCIENCES

"Bibliography on Library Automation," by Alice Billingsley.

A compilation of the literature on library automation, this annotated listing is designed to update an earlier bibliography compiled for the Clearinghouse.

Published in *American Libraries*, March 1972.

Management of Information Analysis Centers: Proceedings of a Forum, edited by William A. Smith.

This is a proceedings volume of a forum held by the COSATI Panel on Information Analysis Centers (now defunct).

EDRS - ED 061 946; MF \$0.65, HC \$9.87.

"Information Center Profile: ERIC/CLIS," by J. I. Smith and Suzanne Frankie.

This article described all phases of ERIC/CLIS operation in the January-February 1972 issue of *Information - Part I: News: Sources: Profiles*.

Single copies free on request from the Clearinghouse.

The Public Library: A Bibliography, by Anne Finnan.
ERIC/CLIS commissioned this report to be used as a reference tool for researchers.
EDRS - ED 056 729.

Special Libraries: Planning and Operation - Preliminary Draft, by Betty Weiner.

This monograph on special libraries can be used as a reference tool for anyone developing a special library.
EDRS - ED 061 982.

ERIC Information Analysis Products 1967-1972, edited by Mary F. McCord.

ERIC/CLIS has compiled a cumulative edition of *ERIC Products*.

CCM Information Corporation, 866 Third Avenue, New York, N.Y. 10022, \$14.95.

Library and Information Sciences, an ERIC Bibliography.

A valuable reference work for librarians and others, this is a listing of all accessions to the ERIC collection related to the library and information sciences.

CCM Information Corporation, 866 Third Avenue, New York, N.Y. 10022, \$9.95.

READING AND COMMUNICATION SKILLS

Eight new basic bibliographies are listed below:

"A Selected Bibliography on Reading and Perception," comp. by Nancy Neff.

"Selected Annotated Bibliography on Reading Comprehension," comp. by William Rupley.

"Selected Annotated Bibliography on Methods and Materials for Teaching Reading," comp. by William Rupley.

"Selected Annotated Bibliography on Humanizing the Teaching of Reading," comp. by Turee Olsen.

"Selected Annotated Bibliography on Reading Diagnosis," comp. by Turee Olsen.

"A Selected Annotated Bibliography on Regional and Social Dialects," comp. by Holly Smith.

"Selected Annotated Bibliography on Individualizing Learning in the Middle School Years," comp. by Turee Olsen.

"Selected Annotated Bibliography of ERIC Documents on Reading," comp. by Timothy R. Blair.

These are annotated bibliographies of 15 to 30 items from the ERIC system judged most basic or crucial to the particular topic.

Single copies free on request from the Clearinghouse.

ERIC/RCS Available Products List

This is a complete listing of all publications, reprints, and bibliographies currently available from ERIC/RCS, plus selected items available from NCTE, IRA, and EDRS.

Single copies free on request from the Clearinghouse.

RURAL EDUCATION AND SMALL SCHOOLS

Mexican American Education, A Selected Bibliography (with ERIC Abstracts), ERIC/CRESS Supplement No. 2, comp. by Albert D. Link.

This bibliography was compiled to provide access to the latest research findings and developments on Mexican American Education.

Superintendent of Documents, No. 1780 - 1063, GOP, Washington, D.C. 20402, \$2.50

Rural Education and Small Schools, A Selected Bibliography (with ERIC Abstracts), ERIC/CRESS Supplement No. 2, comp. by Albert D. Link.

This was compiled to provide access to the latest research findings and developments on rural education. A combined RIE and CIJE index is included at the end of the bibliography.

Superintendent of Documents, No. 1780 - 1062, GPO, Washington, D.C. 20402, \$2.75.

Health Services for Migrant Children, by Beverly Bove.

Written for people working to meet the health needs of migrant children, this handbook provides suggestions concerning personnel roles and lists addresses of national and state agencies where resources are available.

Superintendent of Documents, No. 1780-01109, GPO, Washington, D.C. 20402, \$1.50.



SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

Teaching International Relations, by James Becker.

A global approach to teaching international relations is outlined for the teacher in this publication, which includes goals and purposes, approaches, scope and focus, emphases, choosing content, objectives, and a selected bibliography.

Superintendent of Documents, No. 1780 - 1064, GPO, Washington, D.C. 20402, \$0.30.

The Status of World History Instruction in American Secondary Schools, by William Pulliam.

This is a review of programs and practices in teaching world history, including historical development, criticism, external and internal organization, objectives, teaching strategies, materials and teacher preparation.

EDRS - SO 004 503 (ED no. not yet available), MF and HC.

18, 19, 20: Will They Vote? Suggestions and Resources for Students and Teachers, by Nicholas Helburn and Joanne Binkley.

This paper provides a timely and up-to-date resource for preparing the newly enfranchised voters, and also includes a discussion of some important aspects of voting, suggestions for the classroom, and instructional resources.

EDRS - SO 002 484 (ED no. not yet available), MF and HC.

TEACHER EDUCATION

In Defense of Man: Educators and Environmental Action, edited by Joel L. Burdin and Francis X. Sutman.

A series of articles developed at a writers' conference and designed to point up some of the crucial issues that must be faced when considering environmental management.

EDRS (to be announced in the January issue of RIE); MF \$0.65, HC \$3.29.

Compensatory Education: Implications for Teacher Education, by Martin Haberman.

This is a solid background for a critical analysis of compensatory education.

EDRS (to be announced in the December issue of RIE); MF \$0.65, HC \$3.29.

TESTS, MEASUREMENT AND EVALUATION

Measures Pertaining to Health Education: II. Drugs. An Annotated Bibliography, by P.D. Guthrie.

Ninety instruments designed to assess attitudes, behaviors, practices, and knowledge of drugs other than nicotine or alcohol are listed and described.

National Clearinghouse for Drug Abuse Information, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Maryland 20852. Single copies free on request.

Performance Contracting in Principle and Practice, by Robert A. Feldmesser.

A timely discussion of the nature of performance contracting and its applications to the improvement of instruction.

Single copies free on request from the Clearinghouse.

VOCATIONAL AND TECHNICAL EDUCATION

Review and Synthesis of Cost-Effectiveness Studies of Vocational and Technical Education, by Ernst W. Stromsdorfer.

Written for noneconomists, this study is a synthesis of the various approaches used to improve the analysis of vocational education and related manpower training programs. Both cost-benefit and cost-effectiveness studies are summarized.

EDRS - ED 066 554; MF \$0.65, HC \$6.58.

Review and Synthesis of Research on Women in the World of Work, by Mary Bach Kievit.

The materials reviewed in this collection of studies deal with the gainful employment of women, opportunities for employment and advancement, and the maximization of opportunities as a means of personal satisfaction and as contributions to society.

EDRS - ED 066 553; MF \$0.65, HC \$3.29.

ERIC REFERENCE TOOLS

RESEARCH IN EDUCATION

A monthly abstract journal of recently completed educational research reports, descriptions of exemplary programs, and other documents of interest to the educational community. Directed to school administrators, teachers and supervisors, school board members, commercial and industrial organizations, educational researchers, and the public, this journal contains:

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THESAURUS OF ERIC DESCRIPTORS

The definitive vocabulary of education, developed and brought up to date by educators who review the literature in their field. The *Thesaurus* is the major source of subject headings used for indexing and for retrieval of documents and journals in the ERIC collection.

The *Thesaurus of ERIC Descriptors* will serve to give all educators an increased awareness of the language of their field. A useful tool for teachers, the student of education, and the information specialist. Superseding all previous editions, the 4th edition of the *Thesaurus of ERIC Descriptors* contains newly assigned descriptors as of March, 1972.

Clothbound	\$8.95
Paperbound	\$6.95

The above publications are available from Macmillan Information, 866 Third Avenue, New York, N.Y. 10022.

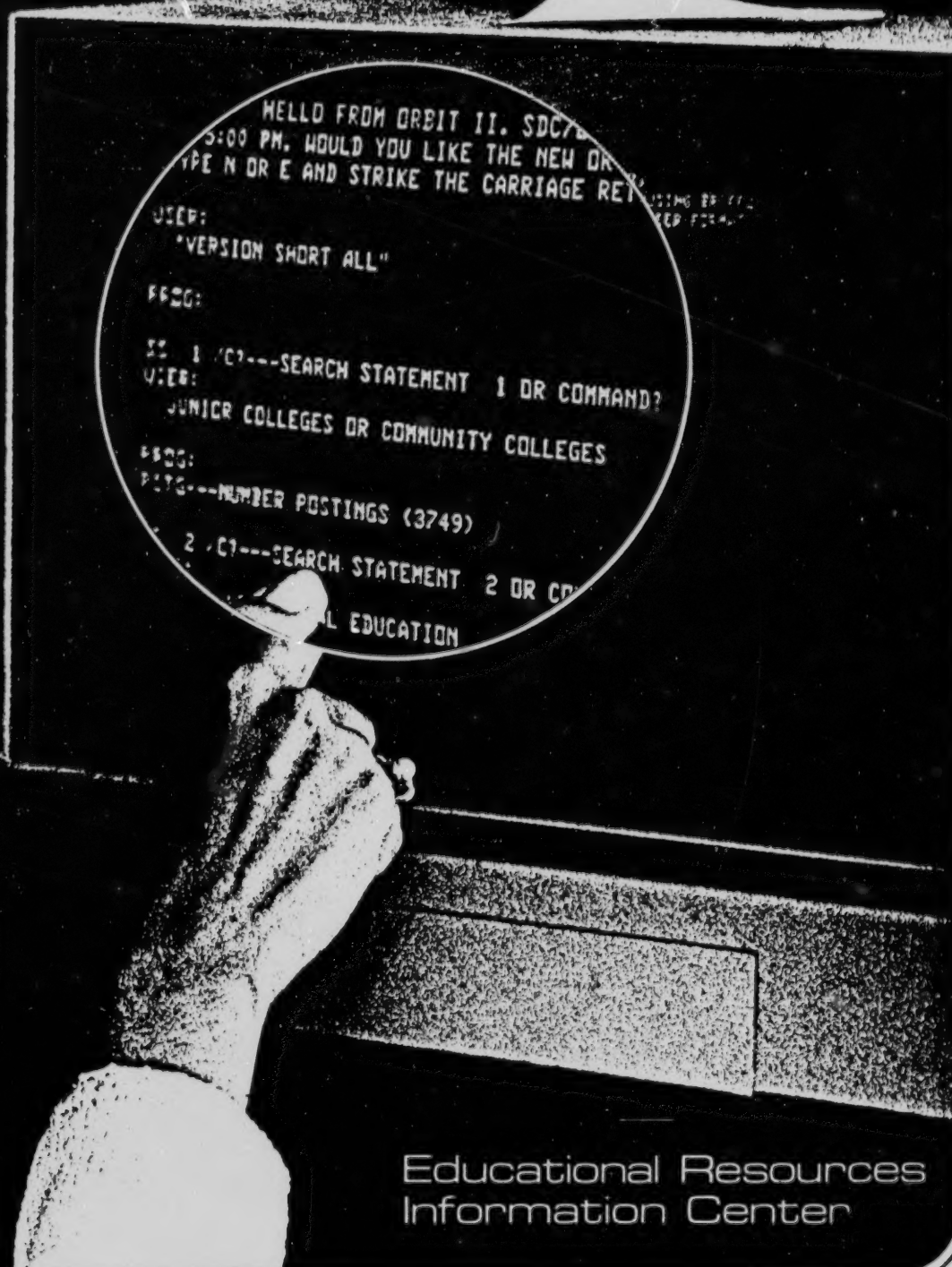
ERIC CLEARINGHOUSES

- | | |
|---|--|
| <p>(AC) ADULT EDUCATION
Syracuse University
107 Roney Lane
Syracuse, New York 13210</p> | <p>(FL) LANGUAGES AND LINGUISTICS
Modern Language Association of America
62 Fifth Avenue
New York, New York 10011</p> |
| <p>(CG) COUNSELING AND PERSONNEL SERVICES
University of Michigan
School of Education Bldg, Rm. 2108
North University Street
Ann Arbor, Michigan 48104</p> | <p>(LI) LIBRARY AND INFORMATION SCIENCES
American Society for Information Science
1140 Connecticut Avenue, N.W.
Suite 804
Washington, D.C. 20036</p> |
| <p>(UD) THE DISADVANTAGED
Teachers College—Box 40
Columbia University
New York, New York 10027</p> | <p>(RC) RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003</p> |
| <p>(PS) EARLY CHILDHOOD EDUCATION
University of Illinois
805 West Pennsylvania Avenue
Urbana, Illinois 61801</p> | <p>(SE) SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION
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1460 West Lane Avenue
Columbus, Ohio 43221</p> |
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University of Oregon
Library, South Wing
Eugene, Oregon 97403</p> | <p>(SO) SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
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Boulder, Colorado 80302</p> |
| <p>(EM) EDUCATIONAL MEDIA AND TECHNOLOGY
Institute for Communication Research
Stanford University
Stanford, California 94305</p> | <p>(SP) TEACHER EDUCATION
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Arlington, Virginia 22202</p> | <p>(CS) READING AND COMMUNICATION SKILLS
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Washington, D.C. 20036</p> | <p>(TM) TESTS, MEASUREMENT, AND EVALUATION
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96 Powell Library
Los Angeles, California 90024</p> | <p>(VT) VOCATIONAL AND TECHNICAL EDUCATION
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THE ERIC REPORT

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Information Center

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THE ERIC REPORT

User services is a key component of the ERIC system. In this issue of the *ERIC Report* each Clearinghouse describes its method of bringing information to interested practitioners. Several comprehensive systems that make ERIC materials available to users—the Systems Development Corporation, Florida Educational Resources Information Center, and Macmillan Information Division—are also explained here. The *Report* also provides other information useful to users of ERIC.

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Professor, School of Library Service
University of California, Los Angeles

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COMMUNICATING INFORMATION

by Robert M. Hayes
Professor, School of Library Science
University of California, Los Angeles
Guest Editor

ERIC was initiated for a very valuable purpose—to provide a continuing means of access to the published results of research in education. It soon expanded its scope to cover the full range of educational resources. The result is that today ERIC, its publications, and its services in distribution of reports are an important tool for communication in education. But the process of creating and organizing ERIC has achieved a far more significant and potentially valuable result.

The very structure of ERIC—the set of problem oriented clearinghouses—now represents far more than simply a means for acquiring and screening the literature. They are the counterparts in education of the information analysis centers which were recognized in the landmark Weinburg report, *Science, Government, and Information*, as so necessary to the advance of science and the development of technology. Anyone who has been in the information business for long has learned that those with responsibility for decisions, while they need and want access to the data and published reports on which to base their decisions, need and want even more to have informed analysis and interpretation of those data. If this is so in science and engineering, based as they are on well tested theory and measurement, how much more is it so in education.

The tangible evidence of the capability which exists now in these clearinghouses is the set of publications which they are producing, publications oriented to the problems of the practicing professional, the administrator, and the researcher in their respective fields of responsibility. These are providing analyses and syntheses of the results of research and practice; they are providing interpretation that give context to otherwise isolated publications; they are providing evaluations that give depth and meaning to the data reported.

These capabilities now exist and the immediate results of their work are available on a continuing basis. Like any capability however these will be effective to the extent they are used and challenged. The *ERIC Report*, by bringing the full scope and extent of what now exists to the attention of the educational community, can serve as one means of increasing the services of the ERIC Clearinghouses to education.



During the early 1970s, the number and power of on-line retrieval systems have increased so greatly that predictions are being made that on-line services will soon be a multi-million dollar market. Three groups are particularly affected by this growth:

- those who screen and process literature and make it available in printed or machine-readable form
- those who need to search the literature, either as users or on behalf of the end users
- those who acquire machine-readable materials and make them available, on-line, to interested users.

Each of these groups understandably has a different perspective on the value of on-line services. To the data base developer or supplier, on-line services represent both an opportunity and a threat. The opportunity is for wider dissemination, especially to those who cannot afford the investment necessary to acquire and process the tapes themselves on a regular basis; the threat is the possible reduction in total income from the sales of tape or printed products.

To the user, on-line services represent an opportunity to provide faster and more complete responses to user inquiries, at a lower cost per search than either manual searching or do-it-yourself acquisition and searching of the tapes. Interestingly enough, on-line service also poses a threat to some organizations for exactly the same reason. The availability of on-line services at low cost can provide an embarrassing contrast to existing do-it-yourself data processing services within the user's institution.

Between these two groups—the data base suppliers and the users—are the suppliers of on-line services. System Development Corporation is one of several such organizations "in the middle." We began operating on-line services in 1965 and were among the first to make the ERIC file available for on-line searching. In 1971, the entire RIE (Research in Education) and CIJE (Current Index to Journals in Education) files were placed on line, as a keystone of SDC's nationwide on-line service.

A VIEW FROM THE MIDDLE: The SDC/ERIC Search Service

Judith Wanger
System Development Corporation

HELLO FROM ORBIT II. . .and the user is on his way.

From the perspective of a seller of on-line retrieval services, the capabilities of his retrieval system often seem to be the most important aspect of the service he is offering. For that reason, a heavy investment is made to make the system as fast, responsive, powerful, and "friendly" as possible. The ORBIT II system that underlies SDC's service (and the National Library of Medicine's service) has been designed and improved with that objective in mind, and SDC takes pride in the fact that the system is regularly used, on a daily basis, by over 200 organizations, including some in foreign countries.

Yet, it is not the retrieval system alone that the user is buying. No matter what arguments are posed with respect to the cost-effectiveness of on-line searching in general or to SDC's system in particular, the arguments are quickly negated if the potential user does not feel positive toward the data base itself. Thus, ERIC itself is a crucial element in the sale of on-line ERIC searching. This fact of life means that we must take a direct and personal interest in the continued growth and improvement of the ERIC data base and in the creation of greater awareness of its value, both within and outside the educational community.

SDC believes that the growth of on-line access—to ERIC and other data bases, as well—will help to accelerate two major trends within the information community:

- the trend toward placing a higher and more accurate value on information and information services
- the development of greater responsiveness by information service suppliers to the information consumer

WHAT'S IT WORTH?

Most librarians and information specialists agree that the philosophy of free information service—some refer to it as the "Carnegie syndrome"—is very well established in the U.S. Thus, one of the barriers to the introduction of a self-supporting on-line service within an organization is the notion that information ought really to be provided free of charge.

Experience has also shown that it takes some weeks or

months for users of a new on-line service to stabilize their attitudes toward the new resource and their use of it. The first operations at the terminal have an aura of "new toy" about them, and the user is quite conscious of the fact that he is playing with the system, exploring its features to learn what he can and cannot do. But soon the process must begin of integrating the terminal into the rest of the information operations. The process is more extensive than is recognized at first. It involves not only learning to use the on-line system efficiently but also building awareness of the new capability among information consumers in the organization, developing or adapting procedures for taking user requests (if one is not himself the user), and developing procedures for relating system costs to user services. One needs, in short, a "project" approach to the introduction of on-line operations.

Some organizations, both in education and in other fields, have not been under great pressure to concern themselves with search costs. For example, the nationwide retrieval service for medical literature—"MEDLINE"—has been almost entirely supported by the National Library of Medicine. This support has helped to create a network of over 200 remote terminals located in medical schools, independent medical libraries, and selected federal institutions throughout the U.S.¹ The transition to a partially supported service is scheduled to begin in August 1973, with the cost for computer time and communications moving from zero to \$6 per terminal hour, still below actual costs and well below the cost for any commercial service. The change from free service will certainly test the value of the service to its users and will probably increase the concern with cost-effectiveness in the use of the on-line system.

On-line use of ERIC has also been subsidized, though to a much lesser extent. Whereas the National Library of Medicine subsidized and encouraged the placement in operation of a very large number of inexpensive terminals, the U.S. Office of Education (and now NIE) has provided its support to a relatively few institutions, primarily in an experimental mode. Other educational institutions not served under this arrangement have sought commercially available services, the result of which is more diversity in the funding and use of on-line ERIC than there is for on-line medical information retrieval.

In the university community, particularly, the philosophy is developing that on-line information service should be a fairly self-supporting activity. The University of Washington, for example, charges the user or his department \$8.50 for each ERIC search. Included in this cost are computer-connect time, communications, and off-line printouts. The library provides the staff and terminal in this case, but other universities are even including some staff time in their average \$8-\$10 per-search cost.

The Texas Information Service, an NIE-sponsored dissemination project, provides another good example of an organization that is highly conscious of cost-effectiveness, as well as high-quality user services. With about 8 months of experience with a batch-mode system for searching ERIC, they had a useful framework—including cost and performance data—for assessing the relative value of on-line ERIC access. Previous experience showed that the average cost of a single ERIC search (for machine-related costs), under the batch-mode system, was \$11. On the basis of six months of on-line searching of ERIC, using SDC's system, the average per-search cost (including terminal rental, computer time, communica-



tions, and off-line printouts) is now at \$13. The more difficult part of the comparison, of course, is to assess the benefits of on-line service.

TIS reports that this slight increase in cost "is more than offset by the increased efficiency of TIS staff and operations and more particularly by the increase in search quality." Specifically, they summarize the advantages of on-line in five areas: 1) search strategies may be altered while the search is in progress; 2) searchable categories are greatly expanded; 3) searches may be processed as they are received; 4) descriptor or spelling errors show up immediately on-line; and 5) print options are available.

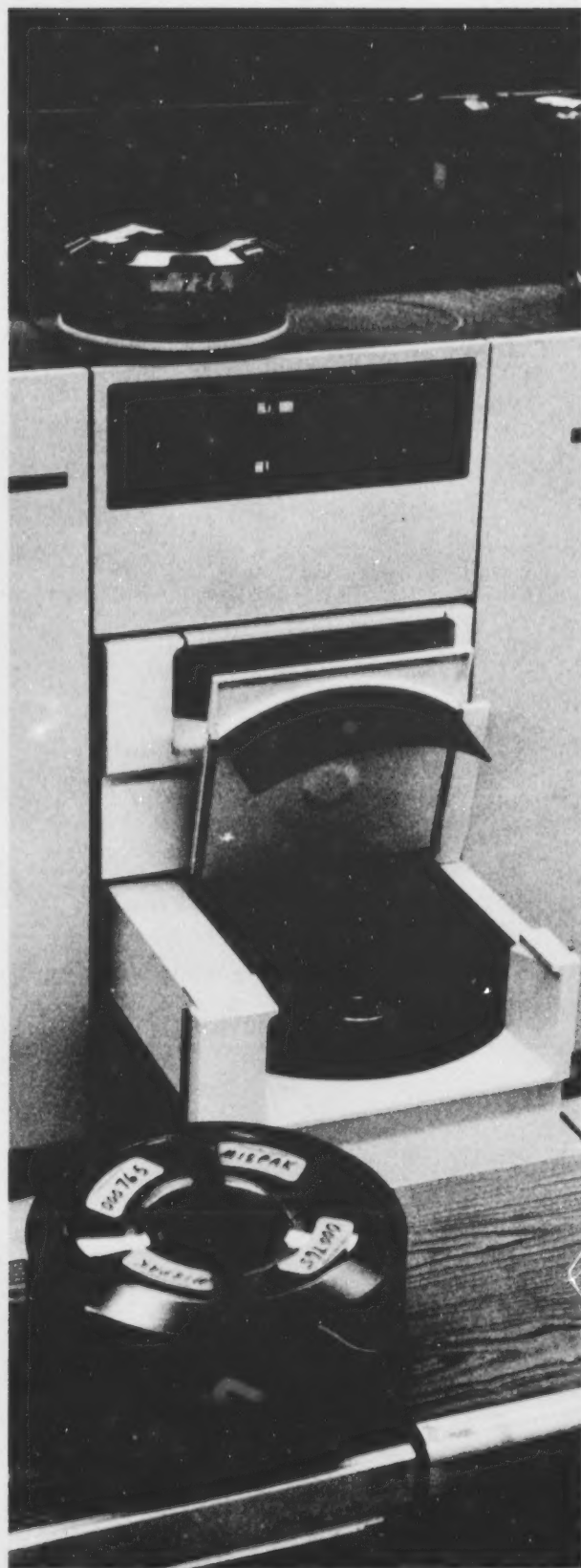
We believe that the diversity of ways in which institutions are bringing on-line service to their users is healthy. It is still too early in the history of on-line services to prescribe the "one best way" to introduce and place a value on on-line services; thus, experimentation and diversity are helpful. In some cases, the sponsoring institution is asking the individual information consumer to recognize the value and cost of information. In others, the recognition is at the institutional level. In either case, value is being placed on information. The Carnegie free-information syndrome is gradually being displaced by a more eclectic philosophy in which different information services and different user communities dictate the manner in which a dollar value is attached to information and information services.

THE TRIANGLE: ERIC-SDC-USERS

The advent of on-line services has brought about a greater intimacy between the user and the data bases that he searches and it has increased the necessity for feedback between and among the several groups involved—the users, the data base suppliers, and now the suppliers of on-line services. The supplier of on-line services is a very significant member of the triangle, because he has the greatest potential for providing the necessary linkage between the other two members.

What linkages are necessary? One of the most important is conveying knowledge of the contents and organization of the on-line data bases. SDC currently provides access to four major data bases: ERIC, MEDLINE, CHEMCON (Chemical Abstracts Condensates), and CAIN (Cataloging and Indexing System of the National Agricultural Library). In addition, six other data bases are on-line in an experimental mode, preparatory to full on-line operations. Each of these data bases has its own history of development, its own acquisitions-indexing-abstracting philosophy, and its own descriptive language. The intimacy of

¹ McCann, Davis B. and Joseph Leiter. "On-Line Services Beyond." *Science*, Vol. 181, July 1973, pp. 317-324.



The ERIC data base—RIE and CIJE, from 1966 to date—is stored on 2 of these IBM 3330 disks, each of which holds 100 million bytes (or characters).

on-line operations requires that the user develop a much more thorough and detailed understanding of each data base than was ever required of him in pre-on-line days. In some instances, the data base suppliers are eager to help the user develop that understanding. In others, the data base supplier is not really organized to provide any direct contact with users and may have to reject requests to meet with user groups, to discuss and explain selection and indexing practices, and to help in their substantive searching problems. The link, then, must come from the on-line service supplier.

Just as users need information from data base suppliers, the latter—whether they recognize it or not—also need feedback from users. The on-line user quickly discovers certain kinds of information about a data base of which the data base supplier may or may not be fully aware. The most common problems involve inconsistencies in indexing practice or poor quality control features. In a batch system, the mis-indexed items may simply be “lost,” never to be seen or found again. In an on-line system like ORBIT II, with capabilities for selective display of the index, the items may become embarrassingly apparent.

Users of on-line systems also make discoveries or draw conclusions about subject or area coverage that may be highly useful to the data base suppliers. Whose responsibility is it to convey these conclusions, and feedback about the kinds of problems outlined above, to the data base suppliers? The answer is not yet clear, nor is it clear whether the data base suppliers should aggressively seek feedback from their users about their data base. Some data base suppliers and most suppliers of on-line service are commercial, for-profit organizations that cannot be “big brother” to their users or subject them to any regular reporting system. On the other hand, it is clear that providing on-line access is not—or, at least, should not be—simply a matter of having the right computer and retrieval program, of selling remote-terminal access, and responding to inquiries from users on the status of the computer and the availability of data bases. Offering on-line ERIC service, for example, involves such responsibilities as:

- proper handling of the data base, e.g., allowing users to separate, at will, the ERIC file into the journal or report literature, or allowing them to search by major descriptors
- training of users in the *Thesaurus of ERIC Descriptors*
- helping users to understand the scope and coverage of the ERIC data base
- responding to inquiries regarding ERIC search strategies
- evaluation and transmission of feedback from SDC's on-line ERIC users to the responsible individuals in central ERIC.

IN SUMMARY

We anticipate that our view from the middle will continue to be enriched by our link to the experiences of our on-line users. We also believe the exchange of information—regarding costs, procedures, and feedback for data base suppliers—that we can promote among our users will serve the cause of all members of the information services triangle, and will impact as well on the traditional values of information service.

THE FLORIDA EDUCATIONAL RESOURCES INFORMATION CENTER

Educational innovations are taking place every day in Florida, and particularly so in the state's educational information retrieval system. The Florida Educational Resources Information Center (FERIC) offers a modern, quick and inexpensive method of providing the results of educational research to Florida educators, and helps keep them informed on nearly every phase of education in Florida and the nation.

FERIC, located in the State of Florida's Department of Education, is three years old and has already expanded its services five-fold since 1970. News of the Center's information retrieval system is spreading throughout Florida and more and more educators are taking advantage of it. During Fiscal Year 1972-73, it provided services to the staffs of 33 of Florida's 67 district school offices.

In addition to public educators, the State Cabinet, Legislature, and other state governmental agencies are requesting assistance from the Center and are helped on a time-available basis. FERIC also has a continuing working relationship with the Florida State Library and a number of federally-funded educational projects in the state.

Many searches are conducted by FERIC for the exceptional child education programs, including the Florida Learning Resources System. A different color paper (blue) is used for these search requests so that they can easily be filed and retrieved. All other search requests are submitted on the regular white paper form.

FERIC provides a selected dissemination of information to Department of Education staff. Various materials, such as subject-related journals and publications, and magazine and newspaper articles are reviewed and forwarded on a regular basis to staff. This allows the staff more time for regular duties while they remain abreast of latest happenings in their respective fields.

Graduate students in education may be offered services provided the requests are clearly related to Department programs or projects, or to the professional duties of the individuals. FERIC does not honor requests from private agencies or individuals but refers them to commercial servicing agencies.

Microfiche copies of education documents, print-outs or resumes of documents, and technical assistance are provided upon request by FERIC and 66 satellite centers to eligible individuals and agencies.

FERIC's data bank includes more than 70,000 ERIC documents reproduced on microfiche, approximately 70,000 indexed resumes of education journal articles, more than 6,000 hard copy titles, several thousand current awareness articles, subscriptions to more than 300 publications listed in the monthly *Current Index to Journals in Education*, a subscription to the Xerox Corporations' curriculum materials, and a collection of fugitive research-related materials.

FERIC began in 1968 as a research-oriented dissemination system in the Department of Education's Division of Vocational Education. Then known as the Vocational Re-

search and Evaluation Information Center, it provided documents, instructional materials, position papers and other information materials to the Division staff and vocational educators in the state.

In 1970, Commissioner of Education Floyd T. Christian designated the Center as the statewide dissemination system with the additional responsibility of offering data and information to all public educators. It was then renamed FERIC and transferred to the Department's Communications/Media Services Center under the Associate Commissioner for Administration.

In the past three years, more than 4,000 information searches have been conducted by FERIC, including 1,886 in the past year. Educators are encouraged to request assistance first from satellite centers, located in nine state universities, 26 community colleges, 21 area vocational-technical centers, five vocational education exemplary programs and five vocational education area program coordinating offices.

If more information is needed than can be supplied through a satellite center, a request for information is sent to FERIC through a principal, librarian, Department of Education staff member or other contact person. The advantage of requesting assistance from a satellite center is that the information may be readily available and no time is lost waiting for it to be obtained through the mail.

Direct requests for assistance may be made to FERIC when a satellite center is not conveniently available. These requests are made by letter, information search request form, telephone, or in person.

Information requests received by FERIC are carefully reviewed for determination of whether the search will be conducted by hand or by computer, or by both methods. If information is requested on a subject where there is a limited amount of reference materials, then a manual search can be made of titles in that area. If the subject matter is broad, then a search of all ERIC documents can be made via the Department's IBM 360/40 computer which provides a print-out summary of what literature is available.

Manual and computer searches are conducted of titles announced in *Research in Education* (monthly), *Current Index to Journals in Education* (monthly), *Abstracts of Instructional Materials in Vocational and Technical Education* (quarterly), and *Abstracts of Research Materials in Vocational and Technical Education* (quarterly).

In addition to manual and computer searches of ERIC documents, pertinent materials can be retrieved from the shelves in the FERIC office. Referrals are made to Department staff and/or other appropriate persons.

The majority of manual searches are made by college students who are employed part-time and work under the direct supervision of the FERIC administrator. They systematically review retrieved information from hard copy files and current awareness files, and review articles in the professional journals. Other periodicals also are reviewed as are the microfiche files.

Documents available on microfiche are duplicated and disseminated at no cost to the requester. The microfiche can be enlarged for reading on a microfiche reader or reader-printer in a satellite center or library.

The majority of requests for information received by FERIC come from satellite centers, with the next highest number of requests from Department of Education staff, then from teachers and school district administrators.

State general revenue and federal vocational education funds support FERIC. Its staff includes two career service

personnel (administrator and administrative clerk) and 15 to 20 college students provided through Florida State University, Florida A & M University and Tallahassee Community College. A professional librarian is also employed part-time to oversee the indexing of printed materials and periodicals, as well as to supervise the manual searchers.

The FERIC office is equipped with three microfiche readers, three microfiche/microfilm reader-printers, two printer-processor units for duplicating microfiche, and one microfiche camera/processor for producing microfiche. The Department's investment in this equipment alone exceeds \$24,000. Other office equipment and furniture represents an investment of \$18,000.

During the past three years, FERIC has expended about \$18,000 for educational materials, including subscriptions to periodicals, journals and books. The ERIC microfiche collection represents an investment of nearly \$7,000.

FERIC's annual budget, including funds for salaries, student assistants, operating expenses, books, educational equipment, and office furniture and equipment, exceeds \$125,000.

Small vocational education grants provide necessary equipment, indexes and materials for satellite centers. Staff is

provided from existing personnel in the school or area office where the satellite center is located.

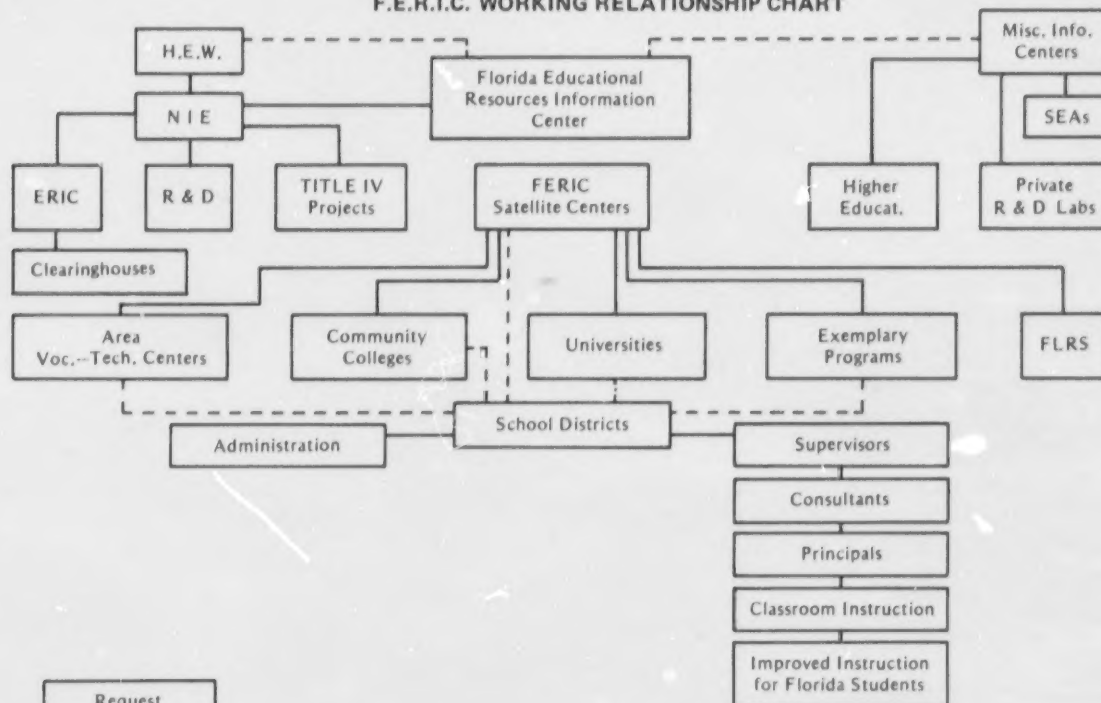
A ten-member Department of Education advisory committee offers advice and counsel on operational policy and procedure of ERIC to the Center's administrator. The committee also reviews the FERIC annual budget request, and periodically evaluates FERIC, making recommendations to the Commissioner of Education on such changes in policy or procedure as are necessary to improve dissemination of educational resources information.

FERIC's administrator keeps in touch with directors of similar programs in other states, learning from their successes of failures, and offering suggestions when requested.

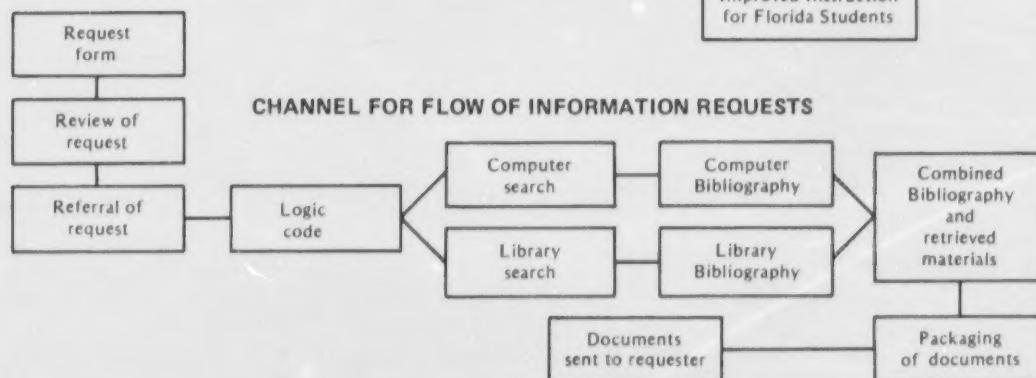
The program appears to be saving teachers and administrators research time, time which they can spend with their pupils. It is also keeping them well-informed on the innovative and alternative educational practices in operation around the nation, practices which they may adopt in order to improve their instructional techniques.

Thus, FERIC is achieving its goal of providing services which directly or indirectly benefit the school children of Florida.

F.E.R.I.C. WORKING RELATIONSHIP CHART



CHANNEL FOR FLOW OF INFORMATION REQUESTS



MACMILLAN INFORMATION DIVISION

MACMILLAN INFORMATION DIVISION, formerly called CCM Information Corporation, was established in the fall of 1967 to develop the publisher's role in the expanding field of new information products and services. Special emphasis has therefore been placed on those information needs most suitably met through non-traditional publishing methods. Broadly stated, it is MID's role to gather and publish information in whatever format and medium is most suitable for dissemination, including photocomposed print products, microforms, and machine readable magnetic tapes.

In addition to producing the printed issues of the *Current Index to Journals in Education (CIJE)*, MID presently offers for sale eight data bases on magnetic tape covering the current literature of Science and Technology, Agriculture, and Education. If the user does not have search software of the applicable type, MID provides search programs for use with the tapes. Although programs are available for use on both IBM and non-IBM computers, the most advanced software provided is designed to run on IBM machines. This software, known as the *MYRIAD Search System*, is a direct access package that operates on IBM 360/370 equipment with inverted search files and compacted linear master files. These files are prepared by MID for use with MYRIAD software, and for the field of Education consist of *Research in Education (RIE)*, *Current Index to Journals in Education (CIJE)*, and *Vocational and Technical Education (AIM & ARM)*.

MYRIAD operates with RIE formatted files, and can be used for both SDI and retrospective search operations in a batch or on-line (or combination) mode. The system is currently operational in California, Massachusetts, and Washington, D.C.

System requirements and characteristics of operation are:

Operating System	360 OS/MFT or MVT
Compilers	Assembler
Utilities	Standard 360
Core Size	250 K
Peripherals	1 Disk Pack (2314) and Two Tape Drives Reader and Printer
Organization	Inverted plus Physical Sequential
Logic	Boolean or Weighted
Term Comparison	Equal, Limits
Truncation	Right Only
Word Length	Variable
Phrase Searches	No
Searchable Data Elements	Any
Output Order	Customer (No Sort)
Output Format	Variable
Limit on Number of Hits	Yes
Number of Programs	5
Number of Utilities	1
File Format	RIE

In general, *MID prices* for the ERIC files are structured to be consistent with the prices established by Central ERIC and the ERIC Processing and Reference Facility. The files supplied by MID are integrated into one operational search file and set up for use with MYRIAD before delivery to users, rather than being separate tapes for each of the various master files and searchable parameters for each file. When the ERIC material is obtained from MID, software is provided for use at no additional cost, except for a small fee to cover the cost of installing the system in the users' facility or a designated service bureau. The package is fully supported by MID and any system improvements and modifications that are developed will be made available to users when implemented.

The cost of running machine searches is directly related to several complex factors. Foremost among these is the rate charged by the computer facility where the work is being performed. Other factors that effect cost are the speed and efficiency of the hardware and software systems used, the size of the file being searched, the schedule priority established for performing searches, and the size and complexity of the search questions that are submitted for processing. The cost of searching the ERIC files utilizing MYRIAD software varies with respect to the following search factors:

1. Number of search terms used per question.
2. Complexity of the boolean search logic used in each search statement.
3. The number of times each term selected for use has been posted (assigned to a document in the file).
4. The number of search questions processed per run.
5. The number of records, or 'HITS', selected and printed for use.
6. The format selected for printing the output.

Given these complex variable factors, the best and surest way to determine operational costs in a particular facility is to make test runs with the software in that facility. Demonstration runs can be arranged upon request.

Updated magnetic tape files are provided by MID on a monthly, bimonthly, or quarterly delivery schedule to meet the update requirements of the user. For additional information about Macmillan Information Division tape products, and use of the MYRIAD system, contact the MID offices at the following address:

Macmillan Information Division
866 Third Avenue
New York, New York 10022
(212) 935-4296

NEWS FROM THE CLEARINGHOUSES



SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

BRIDGING THE GAP

All of the resources of ChESS—collections, facilities, and staff—are devoted to "bridging the gap" between producers and users of ERIC information.

The facilities of the ERIC Clearinghouse for Social Studies/Social Science Education greatly enhance user services in the Boulder-Denver areas as well as regionally, nationally, and internationally. A friendly, informal, yet professional atmosphere is found at 855 Broadway. A functional layout including a game and meeting room, resource center, and a large living room allow the user space to try out innovations, view materials and, most importantly, use the ERIC microfiche collection.

The social studies physical collection is maintained in the Resource and Demonstration Center—a unique resource—which houses professional and reference books, an up-to-date file on associations concerning social studies, publishers catalogs, textbooks, games and simulations, a collection of social studies projects, and of course, a complete ERIC microfiche collection along with portable microfiche readers.

In addition to excellent facilities and materials, staff with expertise in the various social science disciplines are available to give the user first hand information. Since the Social Science Education Consortium (SSEC) sponsors ERIC/ChESS, the two organizations work as a team in providing user services.

ChESS resources meet user needs through workshops, answering information requests, accommodating visitors, and preparing publications. ChESS resources are utilized to promote the ERIC system, disseminate ERIC information and assist in applications of ERIC data.

Staff assisted workshops are offered locally, regionally, and nationally. Educators participate in pre-service, inservice, and individual or team workshops—the major objective of which is to introduce participants to the nature of and disseminate information about ERIC. Additional activities include review and demonstration of specific social studies projects and other social studies materials. When the workshop is held away from the center, workshop models developed by ChESS are presented.

User information requests received by visitors, letters, and by phone allow for communication with present and potential users of the ERIC system for the purpose of clarifying the ERIC function and helping disseminate ideas in education. Requests are analyzed to determine how they can best be handled, whether by telephone, pre-printed form letters or personal letters, both of which include, when appropriate,

referral to the BOCS retrieval center, referral to other ERIC clearinghouses, other organizations, ChESS publications, references to copyright or other sources, resource people, or a limited manual search through RIE and/or CIJE.

In order to help determine user needs, requests are analysed for job position of requestor, type of institution, state and geographical area from which the request came, and the topics of interest to requestors. Subject analysis gives data upon which to base future publications and newsletter articles which serve to answer a great number of requests. Analysis has also led to the creation of topical information pre-printed sheets, each on a specific topic, entitled, *Topical Information and Referral Sheets (TIRS)* and designed to answer the majority of requests. Other requests can be answered by sending the regular ChESS newsletter which also includes an insert covering a current topic of educational interest from the social studies area.

The staff expertise and collections are used for analytical studies which are provided to users through workshops and publications. Whether conducting a workshop or answering information requests, emphasis is upon helping persons and/or organizations understand the ERIC system network and interesting them in doing their own manual search or acquainting them with a retrieval center. Users are given information which includes nearest microfiche location centers, ChESS publication lists, newsletters, and brochures on the ERIC system in general and more specifically, on ChESS.

SCIENCE, MATHEMATICS AND ENVIRONMENTAL EDUCATION

COMMUNICATING TO USERS

The ERIC Center for Science, Mathematics, and Environmental Education has been using a number of procedures to disseminate information in its fields of responsibility. Communication procedures include three newsletters, presentations and workshops at many meetings, special workshops for selected target groups (supervisors, librarians, administrators, teachers), and selective dissemination of information to groups of people.

Among the most basic communication devices are the three newsletters produced by this Center. The Science Education newsletter is issued four times per year, the Mathematics Education newsletter four times per year, and the Environmental Education newsletter eight times per year. These newsletters are designed to provide information to large groups of people with diverse interests. Information included in the newsletters is determined by the staff of the Center, but requests for information received at the Center and discussions with Center staff at meetings and workshops have a great influence on the content of the publications.

ERIC/SMEAC has also been holding conferences and workshops for various user groups to provide specific information based on analyses of each groups needs. A series of conferences was held during the 1971-72 school year with state environmental education coordinators to discuss the ERIC system, how ERIC operates, how ERIC could be used by them, how they could help the ERIC system, and products and services they needed. As a result of these conferences, several ERIC products were developed and some of the recommended services were provided. Another series of conferences was held during the 1972-73 school year. These

conferences were for the purpose of providing information to the state coordinators, but also to have them review products and to cooperate with product development. A communication system was also established among the coordinators by ERIC/SMEAC. Information is sent to ERIC/SMEAC from the various states, compiled by this Center, and disseminated to all fifty state coordinators (or the person designated). Information regarding ERIC products, government activities, and instructional materials are also included in the special mailings.

Other information networks are being developed in other areas. These networks depend upon identifying selected target groups, cooperation of people within the target groups, and staff time at ERIC/SMEAC. As staff time permits we are working to develop networks with groups of people who are in positions to provide information transfer to large constituent groups. ERIC/SMEAC services to special groups can include organizing conferences and workshops, developing communication systems, and assisting in information dissemination.



TESTS, MEASUREMENTS, AND EVALUATION

PRODUCTS AS SERVICES

One of the most significant components of the user services activities is the information analysis product at the ERIC Clearinghouse on Tests, Measurement and Evaluation (ERIC/TM). Information analysis products, better known as TM Reports, serve as a bridge between the vast amount of information in the ERIC data base and the information needs of a variety of users. Since the TM Reports are used to answer questions posed by our users, the audience is kept in mind at each step in the preparation of a product. Before selecting a topic a survey is made of requests for information received by the clearinghouse. The requests are analyzed to determine the kinds of questions asked by the various segments of our audience. The subject, the target audience, the topics to be covered, the format, and the method of dissemination are then determined.

For example, ERIC/TM has received hundreds of requests for information on criterion referenced tests (CRT). These queries come from college students writing papers for class assignments, professors wanting supplementary materials for their classes, researchers, and theoreticians requesting information on highly technical aspects of the subject, and teachers and principals searching for basic information to aid them in deciding whether to incorporate criterion referenced measures in their programs or classrooms or how to develop a criterion referenced instrument tailored to their needs? For the student, practitioner, and researcher not familiar with criterion referenced testing a definitive paper is produced which discusses the strengths, weaknesses, and problems associated with CRTs. For the specialists and theoreticians summaries and reviews of the papers on CRTs presented at the 1971 and 1972 meetings of the American Educational Research Association are available. Anyone wishing to study CRTs in depth or who needs more extensive information than that provided in

the reports is referred to the bibliography on criterion referenced testing. For those who want to try their hand at developing CRTs a do-it-yourself guide entitled *Issues and Procedures in the Development of Criterion Referenced Tests* is currently being prepared.

Each TM Report is written in the language and terminology familiar to the target audience. Examples are drawn from situations which the target groups is likely to encounter.

Information analysis products not only meet the information needs of the users, but also serve as an introduction to the ERIC system. Users learn that additional information is available in the ERIC data base and how *Research in Education*, the *Current Index to Journals in Education*, and other ERIC tools can be used as a key to unlock a vast storehouse of information in education. Of course the information analysis product is not the only way users are helped. Some of the 3,990 letter, telephone and personal requests received in a year are answered with small focused bibliographies, the byproduct of computerized searches of the ERIC data base. In some cases assistance is provided in identifying appropriate descriptors and designing a search strategy. Whenever applicable referrals are made to other appropriate sources of information.



"PUSHING" USER SERVICES

The problem of getting relevant materials and information in the hands of junior college practitioners was a real challenge to the Junior College Clearinghouse in its early days. How does one "push" or market a free information service? Waiting for the users to contact us on an individual basis was not the answer—they didn't know of our existence, ready and anxious to help!

One solution to the problem has been the establishment of a position entitled "Coordinator of Special Services". This coordinator has developed a program offering specially prepared materials to participants at junior college conferences, institutes, workshops and professional meetings. The information is designed to be relevant to the particular meeting theme or topic and basically comes in two forms: "resource packets" containing abstracts of ERIC documents, short articles and other materials; and Briefs which are short narratives summarizing relevant ERIC documents.

The service involves three steps, each with several difficulties.

1. Identifying the meetings where the participants can profit from the service. The coordinator scans professional bulletins, journals and announcements for up-coming meetings. Finding the date, topic, and name of the person in charge of small local or regional meetings is, however, often a matter of luck. Yet persons attending these meetings may need and appreciate this service more than those at large national conferences.

Personal contact with the person in charge and acquainting them with the service is all important. Form letters or sample packets from other meetings are often ignored, misunderstood, or overlooked until after the conference has ended. A personal

letter, followed up with a phone call to finalize the arrangements, has been a successful approach. Once the nature of the service and the fact that there is no charge or effort expected from the group is understood, the enthusiasm can be overwhelming. For example, one conference organizer responded: "I'll take 500 copies—10 for each participant to take back to his or her college."

2. Determine exactly what type of materials are needed. At first the descriptions of what could be provided were very open-ended and conversations would sound like: Conference Organizer - "Well, what kind of service can you provide?" Answer - "Well, whatever you need." Since the organizer of a meeting is usually unfamiliar with the possibilities, this response is not very helpful. Now, several options including bibliographies, copies or reprints of existing Clearinghouse publications, a resource packet designed around the topic, or a *Brief* are suggested. What is offered depends on how much time there is before the conference is to take place and the nature of the topic. Preparing materials for a national conference with many sessions on a wide range of topics can be an exercise in futility while participants at a workshop for Deans of Instruction from all Virginia Community Colleges on faculty evaluation may only want a list and brief description of evaluation systems found at other colleges.

Unannotated bibliographies are generally not useful to practitioners without time to spend in a library screening every item on the list. The two most popular forms of materials are the resource packet and the *Brief*. A typical resource packet contains a letter introducing the service and describing the contents of the packet, a reprint of an article from a journal or book on the topic, a set of abstracts of relevant ERIC documents, an EDRS order form, and a brochure describing other Clearinghouse functions and activities. Recipients appreciate the packet because it is compact—in a folder with pockets—and because the contents can be read quickly.

When time allows and there is little written synthesizing the current knowledge on a topic, the Clearinghouse staff will compose a *Brief*, which is similar to a working paper or an expanded bibliographic essay, on the subject requested. Topics covered in *Briefs* have included "Instructional Objectives for Junior College Courses" and "Community Services in the Junior College" (see the Clearinghouse products column in this magazine).

Once the type of materials to be compiled is determined, the Clearinghouse staff prepares, reproduces, and packages the materials for delivery or mailing to the conference. This is by far the easiest part of the service.

3. See that all participants receive a copy. If a Clearinghouse representative is not personally attending the conference, the service may never be appreciated by the participants. The coordinator arrived at one conference to find the resource packets spread in a clutter on a table with other free brochures and promotional materials. Few participants took the time to sort through the pile; they didn't even know they were to receive a packet. Another problem arose when it was discovered that the materials shipped by bus would not be delivered to the conference location. It is impossible to foresee every factor that may make delivery or distribution difficult.

The problem of delivery of the products has been overcome in several ways. Distribution of materials at the Western College Reading Association conference was supervised by a representative from the ERIC Clearinghouse for Reading and Communication Skills who attended. Without some Clearinghouse staff supervision, the conference organizer or other contact person needs to be informed of his or her responsi-

bility for delivery of the packets to participants. Occasionally, Clearinghouse material has been mailed to participants in advance of the conference along with registration and other information. If possible, the coordinator attends the conference to evaluate the reception of the materials and answer any questions about ERIC that arise.

Several indications of the success of this service have been received. In some cases, position papers resulting from workshops have reflected the work done by the Clearinghouse staff. Furthermore, the increasing number of requests for this service indicates that although it involves tedious and time-consuming work, it is an excellent way of reaching large numbers of practitioners.



INFORMATION RETRIEVAL CENTER
ON THE DISADVANTAGED

ON THE SPOT

The staff members of the ERIC Clearinghouse on the Disadvantaged (ERIC/IRCD) try to serve educators directly whenever and however they can. Like other ERIC clearinghouses, ERIC/IRCD prepares on-the-spot bibliographies to answer mail requests for information. Some of them—on aging, culture-fair tests, and reading programs, for example—get a great deal of use as the Clearinghouse receives continued requests for information on these topics. Clearinghouse staff also compile more comprehensive bibliographies which are printed and made available through EDRS. The annual bibliography on human relations in the classroom, for example (ED 051 315; ED 064 417), contains a wealth of information on teacher and student behavior in the integrated classroom. We make sure that requestors for information receive a copy of our publications list so that they can write to us directly or to EDRS for papers or bibliographies they know exist which can answer their information needs. And when ERIC/IRCD cannot answer a request for information, the requestor is referred to a clearinghouse or agency that can.

A visitor to the Clearinghouse gets an on-the-spot elementary introduction to the use of the ERIC indexes, if he needs it. The staff also put into his hands products from other clearinghouses relevant to his question, which often contain the documents he is searching for. The Clearinghouse also has a uni-term indexing system which provides direct access to the ERIC/IRCD documents input into RIE and is retained locally. (Some of these local documents are program reports and special collections useful to users who want to supplement the RIE literature.) Visitors are welcome to spend as much time as they are able to at the Clearinghouse. The staff is willing to help the user find the appropriate information and help him to interpret it whenever time allows.

The Clearinghouse staff considers the holders of the ERIC microfiche collection a special class of users, and welcomes any requests for information about the disadvantaged or the RIE and CIJE input from the Clearinghouse. In February 1973, we invited the staff of these facilities to Teachers College for a one-day conference, and during the coming months we hope to hold two-day conferences in which ERIC staff would meet with the service personnel to discuss problems on such issues as RIE and CIJE abstracting and indexing and the use of special utilization packages. We hope to describe our input in some detail as a means of helping these individuals to help others, at least in the area of the literature on the disadvantaged. We expect to be in Boston in December, Atlanta in January, New York City in February, and Buffalo in April. The purpose of these user conferences is to bring together these personnel, allow them to discuss their problems with ERIC, provide them with answers and guidance to questions and problems, and bring them into contact with Clearinghouse personnel and activities, Central ERIC personnel and LEASCO and Macmillan personnel. Any facility interested in sending some personnel should feel free to write for more information now. We try to help all of our users.



MEDIA AND TECHNOLOGY

MICROLIBRARY

The field of educational media and technology covered by the ERIC Clearinghouse at Stanford University is constantly changing. New equipment is introduced every day, and researchers are continually developing new ways of using this equipment. Systems approaches to teaching, individualized instruction, self-pacing, open classrooms, and learning outside the classroom all depend on innovations in media and technology for their existence.

Keeping up with the changes is a fulltime activity for interested educators. And ERIC at Stanford is doing its best to help.

Answering the many requests the Clearinghouse receives for current information on changing technology requires unique and varied approaches.

One approach which has proved very popular is the use of the occasional newsletter, *Now Available*, to highlight conventions, meetings, and other current activities in the field. The May 1973 issue, for example, featured an article on nearly 20 new educational hardware devices introduced to the public for the first time at the Association for Educational Communications and Technology convention less than a month earlier.

But special reports such as these can be issued only occasionally, and can cover only a limited amount of material in four to eight pages.

A far more regular and comprehensive service of the Clearinghouse, made possible by Stanford School of Education sponsorship, is available to help keep educational media and technology-types informed and up to date.

This new service is a MicroLibrary, which contains selected ERIC microfiche on educational media and technology, assembled by the Clearinghouse staff and published by Microfiche Publications in cooperation with the School of Education.

The MicroLibrary, first published in September 1973, contains over 2,500 articles, reports and documents chosen as particularly useful and relevant to the field from among the many that have been abstracted in *Research in Education* between 1966 and 1973. Also included in the MicroLibrary is a printed volume containing abstracts of all the microfiche titles indexed by author, title and accession numbers.

Because of the changing nature of educational media and technology, a much-needed update service for both abstracts and microfiche will be available on a subscription basis beginning next year.

The full MicroLibrary, as supplied through the School of Education and Microfiche Publications, includes five specialized categories. Each may be obtained separately, and each includes its own abstract index. The five categories are: Instructional Television, 900 titles; Individualized Instruction, 500 titles; Instructional Systems Design, 500 titles; Media Evaluation, 200 titles; and Research on Instructional Media and Technology, 500 titles.

All except the Media Evaluation category are subdivided by academic level: elementary education, secondary education, and higher education.

The full collection is expected to be of use to educational libraries, media and resource centers, school systems, and other institutions dealing with the whole range of educational technology and the use of media in education.

A brief run-down on the categories will give an idea of the scope of the MicroLibrary:

Instructional Television includes the subject areas of instructional and educational television, cable television, communications satellites, and instructional television fixed service.

The Individualized Instruction category includes material on the planning and use of computer-assisted instruction and programmed instruction.

The Instructional Systems Design category covers systems concepts and systematic development of instruction.

The Media Evaluation category covers evaluations of computer-assisted instruction programs, programmed instruction methods, educational films, simulation and games, multi-media presentations, television and other media.

The Research on Instructional Media and Technology category includes materials on research methodology, results and trends. It covers exploratory, descriptive experimental, and theoretical research.

More information on the MicroLibrary is available from: Microfiche Publications, 305 East 46th Street, New York, New York 10017.

The MicroLibrary and special issues of the Clearinghouse Newsletter are only two approaches being used by ERIC at Stanford to render the extensive ERIC collection more meaningful to its particular clients. Many other approaches are in operation, and the staff is constantly on the look-out for even more ways of bridging the gap between available information and the potential user.



LANGUAGES AND LINGUISTICS

REACHING OUT

In a continuing attempt to bring the ERIC system to students and professionals in the foreign language field, the Clearinghouse on Languages and Linguistics conducts workshops at various conferences and meetings, and often accepts invitations from colleges to give presentations and classroom instruction on the use of ERIC. The staff considers this type of activity to be one of the most important aspects of MLA/ERIC operations, and perhaps one of the more effective efforts in this area has been MLA/ERIC's participation in the graduate program at Middlebury College (Middlebury, Vermont).

For the past two summers, staff members from the Clearinghouse on Languages and Linguistics have been invited by the Director of the Language Schools at Middlebury to serve as guest lecturers in a course required of all candidates for the Doctor of Modern Languages degree. Entering graduate students are required to spend a provisional summer of study at the college before final acceptance into the degree program. In addition to taking a course in his language field and writing a thesis, each candidate must take a professional course, taught by a series of guest lecturers, which consists of learning the skills and theory fundamental to the degree program, such as bibliography, theory of language learning, research design, etc. Another component of this course is the use of ERIC.

The library at Middlebury College subscribes to *RIE* (monthly issues and annual indexes) and *CJIE* (monthly issues and annual cumulations). In addition, copies of the *Thesaurus of ERIC Descriptors* and microfiche of ERIC documents in the fields of languages and linguistics are available for student use. Any fiche not in the collection can be obtained for students within forty-eight hours through interlibrary loan.

Although these resources are at the disposal of Middlebury's graduate students, their fruitful utilization in graduate work depends on an understanding of the ERIC system. Many incoming students have never heard of ERIC, and the system, quite complex at the first encounter, needs in-depth explanation if its potential is to be fully realized by the user. The college resources, the professional course, and the invitation to participate give the Clearinghouse on Languages and Linguistics a unique opportunity to reach a small but important audience.

Through the experience of the last two summers, MLA/ERIC staff members have developed a three-day program designed to equip the students with the basic search strategy for the ERIC data base and familiarity with the various ERIC publications. Classes meet for two hours daily.

The first day is spent on a basic introduction to the ERIC System using a slide/tape presentation, various overhead transparencies, and sample searches on selected topics utilizing Xeroxes from the *Thesaurus*, *RIE*, and *CJIE*.

On the second day, the first hour is spent on an exposition of the user service and information analysis aspects of Clearinghouse operations, and on examining the *Thesaurus*. The

students choose search topics, and practice selecting appropriate descriptors to carry out the search. The formal classroom program concludes with a review and a self-test of ERIC-related terminology, e.g., "Identifier," "SN," "MF," "Major Descriptor," etc. The second class hour is then spent in the library using the ERIC collection. Students, in groups of three, choose a topic to search. They select the appropriate descriptors, peruse the annual indexes, examine abstracts in monthly issues of *RIE*, and scan microfiche to determine the relevance of the particular document to their search topic. (Availability of microfiche in the Middlebury library is noted by a check mark in the main entry section of monthly *RIE*'s.)

The final two-hour class is also spent in the library. On the third day, each student selects a search topic from a list of approximately twenty prepared by the MLA/ERIC staff. His task is to compile a bibliography of references on that topic which are cited in *RIE* and *CJIE*. Because of the time limit, the reading of documents on microfiche is not required. During this session, the guest lecturers answer questions related to searching and check student mastery of the skills required to utilize the ERIC system.

Each year student reaction has been similar—bewilderment on the first day, dawning comprehension on the second, and enthusiasm on the third. The degree candidates expressed regret that this introduction to the benefits of ERIC had not taken place much earlier in their education, but indicated deep appreciation that such a system exists. They felt, without exception, that they would be using the ERIC resources during future degree work.



COUNSELING AND PERSONNEL SERVICES

WORKSHOPS

What programs for the disadvantaged were to the 60's, career guidance is to the 70's. High government priority and support as well as local interest are contributing to the growth of the newest bloom in the educational garden.

School and community personnel are finding, however, that they are not sufficiently knowledgeable about career guidance to perform adequately the task being set for them. More and more they are asking for help in "getting a handle on" those methods and resources which will help them to help others.

In an effort to bring the ERIC system to its users and to respond to the growing need for information, CAPS has assisted regional and national groups in presenting a series of workshops geared to specific user areas of concern. Most recently, for example, the ERIC/CAPS Center was an active contributor to a workshop on Career Development and Career Guidance sponsored jointly by the 35,000-member American Personal And Guidance Association, and *Impact Magazine*. (See New Products and Services section for proceedings and materials.) Designed specifically for guidance personnel, teachers, principals, placement workers, employment counselors and others in the helping professions, the workshop

brought together theorists and practitioners in a "hands-on" experience which exposed them to new ideas, and enabled them to use the ERIC system for searching out resources and techniques that were most applicable to them in their own settings.

The CAPS Center has found that workshops, both regional and national, respond to several needs among helping professionals: (1) they encourage participants to learn about and use the ERIC system; (2) they allow practitioners and theorists to interact on a face-to-face basis; (3) they involve in simulations and group activities many people who would not otherwise have access to the ERIC resources; and (4) they encourage an exchange of on-the-spot practitioner-oriented ideas. The workshop introduces people to the total ERIC network via a slide presentation and a display of products from other clearinghouses, coupled with participant involvement in an actual search of audience-specified topics defined through the use of ERIC descriptors.

In addition to acquainting participants with ERIC through direct involvement, workshop experiences provide them with the opportunity to become familiar with the latest ERIC materials and resources. The June workshop on Career Development, for example, enabled group members to learn about and utilize a yet-to-be-published set of career development modules which are part of a Comprehensive Career Development System developed by the ERIC/CAPS Center under contract with the National Institute of Education.

Workshop participants also received an extensive collection of selected career guidance programs and materials, gleaned from the CG input over the past two years, which will enable them to examine, at their leisure, the variety and diversity of topical interest resources available to them through ERIC.

Analysis of a workshop evaluation form distributed to all participants at our most recent workshop confirms that practitioners—at least those in the helping professions—are concerned about and committed to their clientele, and want to be in a position to respond to their changing needs. To answer such calls for help, counseling personnel must not only be aware and understanding of the changing scene, but they must be familiar with appropriate ways in which to aid people in responding. Through the ever-expanding information bank that is the heart of the ERIC system, and through its cooperative efforts with other workshop groups, CAPS is continually seeking to improve the flow of quality materials and resources to the consumer.



TEACHER EDUCATION

CENTER ADOPTS ERIC DESCRIPTORS

The Educational Materials Laboratory of the Montgomery Public Schools in Rockville, Maryland serves about 12,000 school employees. It has an impressive collection of books and maintains an ERIC microfiche collection. The lab is presently trying to make its books as easily retrievable as its microfiche.

Staff members at the lab decided to introduce ERIC descriptors into their Library of Congress (LC) system. This is a challenge few take on. They invited an information analyst

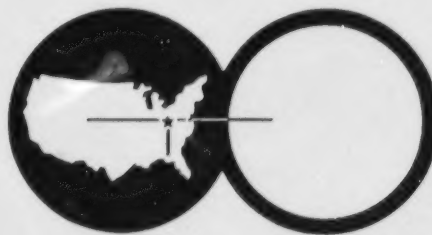
from the clearinghouse to come out for a day-and-a-half workshop on the fine points of descriptor selection and meaning.

The lab staff offers arguments for the changes they believe were a necessity. They have found that ERIC descriptors are better suited to an educational library. Using the LC system, they have had to shuffle through seven drawers in the card catalog for information on "education." Since LC has a time lag in responding to new concepts with new terms ("computers" wasn't introduced until the 1970s), catalogers have had to index books without appropriate terms—like forcing square pegs into round holes. And there wasn't much point to having 80 percent of their collection—ERIC—indexed one way and 20 percent—the books—another.

The task of reindexing books would be herculean, so about 4,000 LC terms will remain in the card catalog along with the new ERIC descriptors. Disadvantages of having multiple expressions for some concepts are fewer than one might imagine, according to staff members. First, staff members answer most requests and are familiar with the changes. Secondly, they have always had to check more than one term in the catalog for each concept since LC kills and introduces terms, too. And, thirdly, most users ask for help with the card catalog anyway.

One point of interest: The advantage of a total ERIC approach to indexing—which the lab is not adopting—is that all important matter in a book is indexed. On the other hand, ERIC libraries do not have browse shelves since the collection is filed by number and not by subject. While the lab does not have the funds to redo its collection, young educational materials centers might contemplate going all the way with ERIC, if browsing is not essential.

Contacts at the lab for more information are Ms. Dell Justin, Librarian, and Ms. Rhoda Hyde, Cataloger. The address is Educational Materials Laboratory, Montgomery Public Schools, 150 North Washington, Rockville, Maryland.



VOCATIONAL AND TECHNICAL EDUCATION

COOPERATING WITH THE STATE

The User Services Unit of the ERIC Clearinghouse on Vocational and Technical Education performs a number of functions that are designed to make the vast vocational-technical information base more accessible to users.

The major responsibility is that of cooperating with State Research Coordinating Units for Vocational-Technical Education (RCU's) to improve or expand information service to their clientele. This is accomplished, in part, through a bimonthly newsletter that includes information on sources of materials or equipment that can make the ERIC document base more accessible to the local teacher. Timely topics are identified and annotated bibliographies or compilations of ERIC abstracts are developed for use by RCU's in information released to their clientele. Announcements of selected new

ERIC publications are also included in the newsletter.

Guides that contain lists of specific information resources in each state are developed and kept up to date. These guides contain lists of specific information services, lists of agencies that maintain the up-to-date ERIC microfiche collection, and information on computer software installations for searching the ERIC files. Individual requests for information from users are often referred to RCU directors, based on services listed in these guides.

Another major responsibility is that of providing information on how to use the ERIC system in solving information problems. Research has shown that vocational-technical and practical arts educators have not generally realized the vast potential of the ERIC information system in solving educational problems. In a seven-state survey of vocational-technical educators conducted by CVTE, it was found that few vocational educators had knowledge of, or effective access to, the ERIC information system's data base. Of those educators who had knowledge of the existence of the system, few had received instruction in how to make effective use of it.

In an effort to correct this problem the ERIC Clearinghouse on Vocational and Technical Education undertook the development of an instructional package that would give the prospective user hands-on experience with ERIC information retrieval tools. It would facilitate the user's search for materials to solve specific information problems.

The *ERIC Instructional Package for Vocational Educators* (ED 073 229) is a set of field-tested teaching-learning materials in booklet form which can be used in either independent or group study. Use of the materials requires access to single copies of the following retrieval indexes and search tools: *Research in Education* (RIE), *Current Index to Journals in Education* (CIJE), *Abstracts of Instructional Materials in Vocational and Technical Education* (AIM), *Abstracts of Research Materials in Vocational and Technical Education* (ARM), and *Thesaurus of ERIC Descriptors*.

In addition to its usefulness as a teaching guide in preservice teacher education courses, the *Package* is ideally suited for use in seminars, workshops, and institutes. The content can be covered in one to two hours. Hands-on exercises require an additional two to three hours for adequate coverage of all of the retrieval tools required to solve the information problems that are included.

Major sections of the *Package* are devoted to descriptions of the functions of RIE, CIJE, AIM and ARM. These are explored so that the potential user can gain firsthand experience in retrieving information. The user is moved systematically through the development of a problem statement, first determining the parameters of the problem and then outlining the search strategy. The problem statement provides the searcher with the information upon which to select terms to be used in conducting a subject index search. Instruction is provided in the use of the *Thesaurus of ERIC Descriptors* in converting user language to ERIC terminology.

Steps in conducting a manual search of the ERIC system are outlined, with accompanying hands-on exercises in the use of RIE, CIJE, AIM and ARM. Formulation of computer (QUERY) search requests is explained with opportunity for participants to demonstrate an understanding of search logic.

Materials to implement the ERIC user training program are available from the:

Product Utilization Section
The Center for Vocational and Technical Education
1960 Kenny Road
Columbus, OH 43210

LIBRARY AND INFORMATION SERVICES

ABSTRACT AGREEMENTS

Abstract agreements, exhibits at national meetings, and workshops providing "hands-on" experience have proven to be the most successful and well-received methods of serving large numbers of users and of introducing the ERIC system to new and potential users.

The Library and Information Sciences Clearinghouse has standing abstract agreements with eleven journals (*American Libraries*, *College & Research Libraries*, *INFORMATION*, *Information Science Abstracts*, *Library Journal*, *Library Literature*, *Library Resources & Technical Services*, *Microform Review*, *School Media Quarterly*, *Special Libraries*, and *Weekly Government Abstracts in Library and Information Sciences*), four newsletters (*Federation Internationale de Documentation*, *Federal Library Committee*, *IRLA Newsletter*, and *LARC Newsletter*), and library school professors at eight universities (American, California at Berkeley, Denver, Florida, George Washington, Maryland, Southern California at Los Angeles, and Washington). Resume forms of LI input to RIE are sent to these organizations as soon as ED numbers are available. The journals publish announcements of the RIE materials which they select as being of particular interest to their subscribers. This mechanism brings ERIC to the attention of a combined readership of approximately 70,000, and provides potential users with a key to the field's fugitive literature.

One major by-product of these abstract agreements is the National Technical Information Service (NTIS) *Weekly Government Abstracts in Library and Information Sciences* which is a special category of the Government Reports Topical Announcements. Abstracts of selected RIE and NTIS documents are listed under the broad headings of Information Systems, Marketing and User Services, Operations and Planning, Personnel, and Reference Services. This weekly publication is available on a subscription basis from NTIS. In addition, an article on the latest activities of ERIC/CLIS is published in the monthly newsletter of the American Society for Information Science (ASIS), the Clearinghouse host organization, which is distributed to all ASIS members and regular subscribers.

National meetings of the American Library Association (ALA), Special Libraries Association (SLA), and the American Society for Information Science (ASIS) provide an excellent opportunity for users to meet Clearinghouse personnel and receive information on the ERIC system. ERIC/CLIS and ASIS share a combined exhibit at these meetings which introduces users to the fugitive literature and services of ERIC and the published literature and services of the professional association in information science.

A particularly interesting mechanism of introducing ERIC was a special three-day program held at the Chicago Educational Facilities Center during the 91st annual ALA meeting. The program, entitled "All about ERIC: The Products, Services and Operation," included personnel and exhibits from ERIC Central, ERIC/CLIS, Leasco, Macmillan, as well as approximately 25 manufacturers of various microform equipment and retrieval units.

Present, potential, and future users of the ERIC system are reached through workshops held at library schools or in conjunction with various meetings. A recent workshop at the Graduate Center for the Advancement of Library-Information Science at the City University of New York (CUNY), for example, had 23 students—21 librarians, one library school student, and one high school teacher. Among the reasons given for attending the workshop were: no previous knowledge of ERIC and being there to learn; interested in purchasing the ERIC collection for their libraries; wanted to increase the use of ERIC in their libraries; and, various reasons related to technical processing of ERIC materials. Librarians are an excellent link to the ERIC system for teachers, students, and general users. To facilitate understanding and use of the system, these "linkers" are introduced to, and obtain a working knowledge of, ERIC through workshops and presentations, like the one at CUNY.

ERIC/CRESS

RURAL EDUCATION AND SMALL SCHOOLS

UTILIZING USERS

After responding to a written or telephoned request, what can a clearinghouse do to maintain contact with the user? Might it be that a user either is, or could be, a potential contributor? Might the user's request be used to assess the utilization of materials announced in *RESEARCH IN EDUCATION*?

In an effort to answer some of these questions, ERIC/CRESS began using a strategy called "Inquiry Follow-Up." In this strategy, the clearinghouse supervisor of acquisitions scans all incoming requests. Requests from project directors, directors of research, teachers working in CRESS scope areas, professors teaching or doing research in CRESS scope areas, etc., are noted in the lower left corner with "I want." The request is not delayed, but continues through regular channels to the information specialist for response.

When the information specialist has completed the response, the "I want" letters return to the acquisitions specialist. After a two to three week interval, a form follow up letter is sent, as follows:

Thank you for your recent request to this clearinghouse. I trust that our response will be useful to you. It appears that your area of interest is similar to the scope of this clearinghouse. If you have any materials (research, resource, etc.) you would care to share with us for our collection, we would be most happy to receive them.

Thank you for your assistance.

This strategy has been utilized since mid-1970, with a 7% return response for 1970 and 1971, and an 8% return response for 1972. Often the response involved a document contribution, which gladdened the heart of the acquisitions specialist. Further, the user had been made aware that ERIC/CRESS had an interest in the user's present efforts, and wanted to remain in contact with him.

An additional utilization made of users' written requests is the tallying of specific requests (where the user knows exactly

what he wants) by type of document requested and by each of ERIC/CRESS' six scope areas. This provides a limited, but unique, opportunity to assess RESEARCH IN EDUCATION input against users' actual needs. The strategy also can be used to help determine areas of impact for proposed synthesis products. Although this strategy has been in use for only a few months, a picture of sorts is beginning to emerge. Bibliographies are the most requested type of document thus far, and the ERIC/CRESS scope area most represented by specific requests is Mexican American education.

ERIC/CRESS appreciates its users, and is always looking for new ways to be of better service, so please keep those cards and letters rolling in!



THE INFORMATION "BROKER"

Mention of the New York Stock Exchange invokes powerful images. Stock listings boards, paper-strewn floors, and the feverish pace of buying and selling are now familiar scenes dramatizing the role of the broker, an agent in such sales and purchases.

In much the same way that a broker serves his clients, the ERIC Clearinghouse on Educational Management attempts to fill the needs of its customers.

The Clearinghouse is, in fact, a "broker" of information on educational resources—thereby serving as an intermediary between the information user and the information producer, the authors of the desired information. As a broker, the Clearinghouse acts to link the information supply to the demand for that information.

"Customers," potential information users, come to the Clearinghouse with information needs, just as a client would approach a broker with an investment need. These needs are either *expressed*, often through letters directly to the Clearinghouse, or they are *observed* by staff members who notice trends in the kinds of topics currently "in the news." Still other ideas come from *Research in Education (RIE)*, ERIC's monthly index and abstract catalogue. Using the descriptive resumes from *RIE*, topics can be chosen because of their general significance.

From these ideas, two series of reviews are written—one on educational management and another on educational facilities. These reviews serve as "digests" of current literature, useful to educators who want to keep abreast of what is being published in their field, but who often lack the time to search through all the available literature themselves.

The review system has two useful effects: (1) It is a more efficient way to keep educators up-to-date, i.e., there is less chance of "missing" something if they "leave the driving to us," so to speak, allowing Clearinghouse specialists to search the literature for them. (2) The ease of keeping abreast of innovations is added incentive to keep up-to-date.

Philip K. Piele, director of the ERIC Clearinghouse on

Educational Management, summed it up this way:

"Judging by reactions to the thirty-six titles so far issued in both of the Clearinghouse's review series, we feel confident the reviews have done much to narrow the gap between information users and information producers."

Once the information *user* is aware of the information *producer*, it becomes an almost mechanical process to actually come into possession of the desired information. Satisfied Clearinghouse "customers" help vitalize the system by referring other "customers" to the system, by offering still other topic suggestions, and by giving the Clearinghouse valuable feedback on its efforts to serve.

Robert Brellis, principal of First Street School, Long Island, New York, one such "satisfied customer," took time to write the Clearinghouse and give his reaction:

"I want to thank you for the assorted publications in the Educational Management Review Series. I find them an extremely concise coverage of the topic. The . . . summary coverage has gotten me out of a number of situations and will be invaluable in the future."

By bringing supply and demand together to satisfy users like Robert Brellis, the Clearinghouse fulfills its brokerage function. The Clearinghouse review series will continue to be an effective part of this function.



HIGHER EDUCATION

IN THEIR BACKYARD

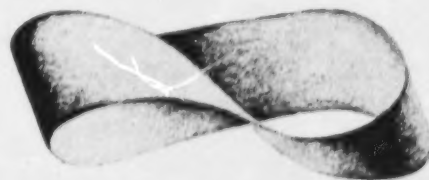
The ERIC Clearinghouse on Higher Education, at the George Washington University, has several interesting advantages to encourage user contacts in the area of higher education. The Clearinghouse is located at One Dupont Circle, in the National Center for Higher Education (NCHE). Located here are 40 of the largest and most active associations concerned with higher education. The availability of contact, resource sharing, and reference work with these associations is advantageous to our users as well as our staff. Many students, faculty members, administrators, and policymakers from across the country visit the NCHE and the Higher Education Clearinghouse.

Many of our constituents, including these associations, provide the Clearinghouse with documents for inclusion into the ERIC system. In turn, ERIC/HE provides those researchers with an information retrieval system aiding their research activities. This relationship is mutually beneficial and creates a strong basis for producer-user relations. This relationship integrates the Clearinghouse activity into the policy/decisionmaking area of higher education, enabling us to act as a catalyst for the work being done in higher education today.

This relationship is further supported by our close cooperation with the National Center for Higher Education Library. The library specializes in the field of postsecondary education and is one of the nation's best, its primary purpose being to serve organizations at One Dupont Circle. The library complements the ERIC collection with reference materials, periodicals, professional books, American Council on Education publications, ephemeral and report literature, and periodicals available through interlibrary loan. Visitors from outside the building are permitted and encouraged to make use of library materials. The availability of hard copy reference material and journal articles (many of which are indexed in the Current Index to Journals in Education) are of great assistance to both user and staff. Often the library staff will refer users to the Clearinghouse for in-depth study of material and personalized assistance in research or informative meetings with ERIC staff members who have particular knowledge in their area of interest. This symbiotic relationship views the user as the most important facet of information-retrieval library work.

In an effort to bridge the gap between the Clearinghouse and the user, the ERIC Clearinghouse on Higher Education has published a compact brochure encompassing various aspects of the ERIC system. Emphasis is placed on introductory material, the ERIC system, our Clearinghouse and its publications program, and the availability and scope of all other ERIC Clearinghouses.

The brochure and our interassociation and professional relationships are only a few examples of our effort to meet the demanding needs in the field of education resource dissemination.



READING AND COMMUNICATION SKILLS

NOVEL SERVICES

The Clearinghouse on Reading and Communication Skills, because of its close relationship with several of the largest professional organizations in education, has long provided special services for users connected with those organizations. It has, for example, prepared special bibliographies and collections of materials for the study groups held prior to the annual convention of the National Council of Teachers of English, and it has served various facilitative and liaison functions in connection with many special projects of NCTE committees for instance, ERIC/RCS is now coordinating a project to collect, evaluate, and disseminate heretofore unpublished tests and measures in the language arts.

The Clearinghouse has also had the opportunity to serve individual users in some unusual ways as well. One recent example involves the chairman of the English department of a predominantly black southern university, who called ERIC/RCS to ask what we could tell him about the validity of a particular language test. His institution had, over the years, developed its own battery of diagnostic language tests for the purpose of placing incoming freshman students in particular

courses and programs. A new administrator was urging the replacement of the local tests by a nationally-formed test. The chairman thought this was unwise, but had no hard evidence on which to base counterarguments; hence his call to ERIC. A quick search of the system revealed a number of pertinent validity studies, all agreeing that the relationship between scores on the test in question and academic achievement was no greater than chance. The chairman later called back to report that, in the absence of any demonstrated superiority of the national test, it was best to retain the locally developed tests favored by the English faculty. He was very grateful.

Currently, ERIC/RCS is engaged in a novel enterprise, conceived and supervised by Dr. Patrick Kennicott, Associate Director for the Speech Communication Module of the Clearinghouse, that is bringing ERIC to the attention of—and the service of—several groups that have not often been previously involved with the system. The National High School Debate Association in February of each year sets a topic for forensic competitions across the country. The 1973-74 topic is "Poverty and the Federal Government." Under Dr. Kennicott's direction, a 66-page analysis of the topic, entitled *ERIC First Analysis*, was prepared by William Reynolds of George Washington University and John Sexton of St. Brendan's High School in Brooklyn. Supplementing the booklet are a bibliography and a 900-page collection of original source materials on microfiche. The bibliographies are available without charge, the booklets for the cost of postage, and the microfiche collections for \$3.50, all from the ERIC Speech Communication Module, whose host organization, the Speech

Communication Association, is helping to underwrite the cost of the project.

It is expected that thousands of high school debaters—and of course their coaches—will avail themselves of these resources, and that many high school librarians will be faced for the first time with the question, "Where's your microfiche reader?" (See illustration.)

Debaters have traditionally been encouraged, as part of their research on the set topic, to write to their Congressmen for information. Such requests have usually been referred to the librarian of the Library of Congress. This year, however, all Congressmen have been informed of the existence of the ERIC/RCS resources and have been offered additional copies of *ERIC First Analysis* and the bibliography, for the purpose of responding to the requests of their young Demosthenean constituents. Dr. Kennicott reports that the number of requests and referrals from Capitol Hill is already considerable, and that the publication of similar analyses and collections of resource materials will henceforth be an annual affair.

Conversations have also begun between the Speech Communication Module and the Research Committee of the Secondary School Theatre Conference about the compilation of research and other data into a kit that may be put at the service of high school drama teachers who find themselves having to defend the educational value of dramatics against budget-cutting administrators and school boards. If this effort comes to fruition, it will bring the services of ERIC to yet another group of educators who have had little contact with the system in the past.





WASHINGTON REPORT

THE INTERPERSONAL TOUCH

Comprehensive educational information centers, such as those sponsored by state and local education agencies, provide a broad range of user services. Typical of information services valued by users are responding to queries through in-depth literature searches and developing information analysis products such as state-of-the-art reviews. Information alone, however, is insufficient. What helps insure educational improvement is the combination of relevant information and interpersonal linkage.

Interpersonal linkage takes many forms, from helping clients locate information resources through ready reference assistance at information centers to providing technical assistance to clients at their job sites through teams of specialists or consultants. One of the more effective forms is the use of full-time field agents, working individually with educators in schools and school districts.

In their evaluation study of the Pilot State Dissemination program (ED 065 739 and ED 065 740), Sam Sieber and his colleagues found that educators at the local level were able to obtain and use more information more effectively when full-time field agents were available to provide help. As the agents solicited clients rather than responding only when sought-out, their clients tended to be fairly low in the school hierarchy and therefore less accustomed to learning about and utilizing the results of research. Even so, "48 percent of the agent's clients demonstrated actual use [of research information] as compared with 38 percent of all other [information center] clients."

What did the field agents do? They sought out prospective clients, helped identify their clients' information requirements, and referred those needs to a retrieval staff who performed computer or manual searches of ERIC, CIJE, and other knowledge bases. After the information was supplied in the form of citations, abstracts, and either microfiche or hard copy of complete reports or articles, the agent reviewed it for relevance to the client, his situation, and the intended use. The field agent then helped the client interpret, adapt, and utilize the information. Frequently, he also arranged technical assistance from state, local, or university specialists.

As one form of interpersonal linkage, full-time field agents typically perform the following user services:

Input Phase (Query Negotiation)

- help client identify his or her information needs

- tailor an information retrieval strategy to the client's particular characteristics (motivation, level of sophistication, etc.) and setting (innovativeness, bureaucratic barriers, etc.)

Referral Phase (Information Acquisition)

- formulate clear, concise statements of information requirements
- communicate the client's characteristics and setting to the retrieval staff so that they can tailor the search

Output Phase (Follow-up)

- review for relevancy to client's needs
- derive implications for practice
- help client translate research and other information to action alternatives suited to his or her particular situation
- Arrange for consultant assistance if needed
- help install innovations or conduct try-outs, if appropriate

Detailed case studies of field agents providing these user services are contained in the second volume of the Seiber study cited earlier.

LEASCO ANNOUNCES ERICTOOLS AVAILABLE FOR PUBLIC SALE

ERICTOOLS, a series of documents dealing with the National Institute of Education's Educational Resources Information Center (ERIC) program, are now available for sale to the public, as announced by Leasco Systems and Research Corporation. Leasco operates the ERIC Processing and Reference Facility for the National Institute of Education.

In making the announcement, W.T. Brandhorst, the Director of the ERIC Facility, pointed out that ERICTOOLS represent the third segment in Leasco's data dissemination program for ERIC. That program was initiated in 1970 to promote maximum utilization of the ERIC files by the user community. The ERIC files, assembled by a unique network of 18 subject specialized clearinghouses and several commercial contractors, represent virtually complete coverage of current significant developments in educational research.

In 1970 Leasco announced ERICTAPES, machine readable records from the ERIC files in magnetic tape form. The following year, the program was enlarged to include ERIC-TERMS, printed records of the indexing terms (and postings to these terms) employed within the ERIC system. These two products, supplementing and extending the basic ERIC abstract journal *Research in Education*, provide a set of invaluable tools for computer searching of the ERIC files as well as stand-alone reference tools for the educational community.

Due to the overwhelming acceptance of the first two products by the user community, and the mounting interest expressed in obtaining the internal working documents and reference tools of the ERIC network, Leasco has enlarged the dissemination base with the inclusion of ERICTOOLS. Seven publications, each available on a limited basis, comprise ERICTOOLS. These include working copies of the *Source Directory*, indexes of Report and Project numbers, Contract and Grant numbers, and ERIC Titles, a cross reference list from ERIC Clearinghouse Numbers to the published accession

number (ED number) of the reports, the *ERIC Source Usage Report*, and finally the *ERIC Operating Manual*, the 200-plus page "bible" which keeps the various components of the ERIC network operating alike. This publication (available in late 1973) is a valuable reference for anyone operating—or contemplating start-up of—a bibliographic information system.

Prices for seven ERICTOOLS publications range from \$15 to \$50 a copy. Specific details on any publication within the program, as well as the newly restructured ERICTAPES program may be obtained from:

ERICTOOLS

Leasco Systems & Research Corporation
4833 Rugby Avenue
Suite 303
Bethesda, Maryland 20014

MICROFORM HANDBOOK TO BE PUBLISHED

The American Association of Community and Junior Colleges has recently entered into an agreement with the National Microfilm Association for publication of the *Handbook* by NMA. Developed by AAJC under a contract with the U. S. Office of Education, the NMA won out in a competition with six other publishers for the publication rights.

The *Handbook* will provide a detailed overview of microform systems and a complete guide for those interested in selecting, organizing or utilizing microform programs. Included is a description of microform hardware and software.

The availability of the product for publication was announced to the publishing industry through the *Publishers Alert Service* which is operated by the National Institute of Education. The procedure for seeking a publisher was carried out in accordance with the requirements of the USOE Copyright Guidelines. NMA has agreed to use its best efforts to have the *Microform Handbook* on the market by January 15, 1974.

USERS SPEAK OUT/ LETTERS & COMMENTS

Dr. Don H. Coombs
ERIC Clearinghouse
Stanford University
Stanford, CA 94305

Dear Dr. Coombs:

Since the ERIC system has been in existence, the San Mateo County Educational Resources Center (SMERC) has been utilizing ERIC's many accessions to help inform local educators of the kinds of resources available to assist them in making decisions concerning their educational problems. Recently a rural school district superintendent, located in a remote area of Northern California, was desperate for resources which would help him promote change among his building level administrators in the area of management decision making. SMERC was able to find 37 documents which met the exact kinds of needs for which their superintendent was seeking assistance. He was particularly pleased to note that some of the citations were references to how industry had solved similar problems. His comment was, "The ERIC system has made America's information resources just as available to my remote rural district as to the large sophisticated urban district. For this I am grateful."

SMERC will continue to incorporate the vast resources of ERIC into its system and, as the rural superintendent stated, "Be very grateful for its existence."

Sincerely,

Frank W. Mattas
Administrator

EDUCATIONAL RESOURCES CENTER

April 12, 1973

Dr. Robert Fox, Director
ERIC-ChESS
855 Broadway
Boulder, Colorado 80302

Dear Bob:

Several of my students and I have had trouble using ERIC because some terms are not listed in the Thesaurus. I'd like to nominate the following:

1. *free schools*—"free universities" is listed and cross-referenced with "experimental colleges". The same would be helpful for free schools.
2. *Summerhill-type schools*—NT for "free schools".
3. *Communal education*—RT for "free schools", schools on communes.
4. *humanistic education*—RT for "affective objectives", mixture of cognitive and affective education.

5. *transpersonal education*—BT for "affective objectives", humanistic education.

ERIC would be enriched and would be helpful to a new potential set of users, the free school people. In one sense the free schools are experimental R and D caters for public schools, so it is important to get this information to the public system with as little delay as possible. I wish there was a special clearinghouse to handle the broad field of affective-humanistic education, free schools, etc., but as a social change with educational implications, it seems more in the domain of ChESS than of any other clearinghouse.

Sincerely,

Thomas B. Roberts
Secondary Education

READERS' REACTION TO ERIC REPORT NO.1

A questionnaire was included in the first edition of the ERIC Report so that readers could evaluate the publication and make suggestions for future issues. Here are their responses.

Readers' Position	Percentage			
Clearinghouse staff member	4%			
Information Center User or Employee	15%			
Librarian	53%			
Teacher	6%			
Student	1%			
Others	14%			
No Answer	7%			
	100%			

Evaluation of Features	No Answer	Very Useful	Useful	Not Useful
Guest Editorials	10%	10%	30%	38%
Feature Articles	8%	49%	39%	4%
News from Clearinghouses	8%	57%	35%	0
Washington Report	13%	50%	35%	2%
User Speaks Out	15%	21%	39%	25%
New Products & Services	10%	58%	31%	1%

Frequency of Publication	Monthly	Bi-Monthly	Quarterly
	26%	22%	31%
			21%

Single Theme	Yes	No
	38%	34
		11

Apparently, the Feature Articles, News from Clearinghouses, Washington Report, and New Products and Services sections were most useful while the Guest Editorials and User Speaks Out features were less well-received. These suggestions will be taken into consideration by the ERIC Report Editorial Advisory Board in their design of future issues.

NEW PRODUCTS AND SERVICES

The following products and services are available from the clearinghouses or as noted. Clearinghouse addresses may be found on the inside back cover.

COUNSELING AND PERSONNEL SERVICES

Developing Students' Potentials, edited by Robert L. Smith and Garry R. Walz.

This paper incorporates workshop speeches and resource guides in three major areas—Achievement Motivation Training; Human Potential Group Training; and Eliminating Self-Defeating Behavior Training.

Capitol Publications, Suite g-12, 2430 Pennsylvania Ave., N.W., Washington, D.C. 20037.

Impact (combined with *Communique*) Volume 3, Numbers 1-6 (1973-74), edited by Garry R. Walz and Susan F. Kersch. This magazine presents articles of current interest to those in the helping professions, resource guides, exemplary programs and encapsulated research findings.

Impact, P.O. Box 635, Ann Arbor, Michigan 48107, \$9.00. (Make checks payable to The University of Michigan.)

Readings: The APGA/Impact Workshop on Career Development and Career Guidance.

This volume contains programs, resources and references to guide those in career guidance to more effective practices. It also contains EDRS document ordering information and forms.

Impact, P.O. Box 635, Ann Arbor, Michigan 48107, \$5.00. (Make checks payable to The University of Michigan.) (This publication will be available through EDRS later this year. Contact ERIC/CAPS for the ED number.)

THE DISADVANTAGED

"Community Control in Perspective," by Nicolaus C. Mills. *IRCD Bulletin*, Vol. VIII, No. 5.

Past demands for community-controlled schools in New York of three groups: Irish Catholics, Jews, and Italians. Single copies free on request from the Clearinghouse.

"'Inequality' by Christopher Jencks: Four Critical Reactions," by Gertrude Goldberg, Nicolaus Mills, David Wilder, Joseph Grannis. *IRCD Bulletin*, Vol. IX, No. 1.

Four educators examine Jencks' study.

Single copies free on request from the Clearinghouse.

"Broadening the Concept of Career Education," by Edmund Gordon, *IRCD Bulletin*, Vol. IX, No. 2.

Discusses the differences in meaning between vocational education and career education, and emphasizes the need for changing and broadening the latter.

Single copies free on request from the Clearinghouse.

Self Concept: An Annotated Bibliography of Selected ERIC References, compiled by Sarah Bobson.

Approximately 250 citations, dated 1970 through 1972.

Single copies free on request from the Clearinghouse.

Mexican Americans: An Annotated Bibliography of Doctoral Dissertations, compiled by Adelaide Jablonsky.

Approximately 60 citations, indexed and categorized, dated from 1965 to June 1972.

Single copies free on request from the Clearinghouse.

School Desegregation: An Annotated Bibliography of Doctoral Dissertations, compiled by Adelaide Jablonsky.

Approximately 100 citations, dated from 1965 to June 1972. Single copies free on request from the Clearinghouse.

EARLY CHILDHOOD EDUCATION

Parent Education: An Abstract Bibliography, by Doris Brown.

A guide to documents from *RIE* and *CIE* on parent education (Supplement #1). The abstracts cited deal with recent studies of parent-child programs conducted either at school or home.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$0.75, ED 072 841.

Early Childhood Teaching: An Abstract Bibliography, by Doris Brown.

A guide to documents from *RIE* and *CIE* on early childhood teaching involving classroom teachers, parents as teachers, and paraprofessionals.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820 \$0.50, ED 072 842.

Multiply Handicapped Children: A Bibliography, by Dorothy O'Connell

Citations from *RIE*, *CIE*, *Exceptional Child Education Abstracts* and other periodicals and books comprise this bibliography on multiply handicapped children.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.35 (no ED as yet).

Open Education: An Abstract Bibliography, by Norma Howard.

A guide to ERIC documents from *RIE* and *CIE* on the subject of open education. The focus is on open education practices in preschool, kindergarten and elementary school.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.35 (no ED as yet).

Socialization of Young Children: An Abstract Bibliography, by Mima Spencer.

A guide to ERIC documents cited from *RIE* and *CIE* on the socialization of young children. Included are such topics as competition, cooperation, conflict resolution and classroom interaction.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$0.70 (no ED as yet).

Young Children with Handicaps: Part I Emotional Disturbance and Specific Learning Disabilities: An Abstract Bibliography, by Elena De Los Santos Mycue.

Part I of a series of abstract bibliographies concerning handicapped children containing resumes on emotional disturbance and specific learning disabilities taken from *RIE*, *CIE*, and *Exceptional Child Education Abstracts*.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.45 (no ED as yet).

Young Children with Handicaps: Part II Physically Handicapped: An Abstract Bibliography, by Elena De Los Santos Mycue.

Part II of a series of abstract bibliographies concerning handicapped children. Citations are taken from *RIE*, *CIE*, and *Exceptional Child Education Abstracts* which deal with aural, visual, orthopedic, and speech handicaps.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$2.35 (no ED as yet).

Young Children with Handicaps: Part III Educable and Trainable Mentally Handicapped: An Abstract Bibliography, by Elena De Los Santos Mycue.

Part III of a series of abstract bibliographies concerning handicapped children contains resumes from *RIE*, *CIE* and the journal *Exceptional Child Education Abstracts* on the educable and trainable mentally handicapped.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.45 (no ED as yet).

Young Children with Handicaps: Part IV Resources: Directories, Newsletters, Bibliographies and General Information: An Abstract Bibliography, by Elena De Los Santos Mycue.

Part IV of a series of abstract bibliographies. These resumes pertain to resources on the handicapped: directories, bibliographies, curriculum guides, conference proceedings, government guidelines, general information documents and some newsletters and journals.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$2.45 (no ED as yet).

Notes on Distinction Between Education and Excitement, by Lilian G. Katz.

A discussion of the implications of making learning exciting for children. A distinction is made between short-term, thrilling activities and interest-sustaining, satisfying activities that the author believes are more conducive to learning.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$0.55 (no ED as yet).

Understanding Readiness: A Rationale, by Earl Ogletree.

The author offers a theory for explaining the relationship between physical maturation and mental development and suggests that accelerated, premature early education can be detrimental to the child's physiological, emotional and cognitive development.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.00 (no ED as yet).

Creativity: A Positive of Young Children, by Susan B. Thomas.

A short paper and abstract bibliography concerning creativity and creative thinking. The paper discusses the figural creativity in relatively disadvantaged children and urges teachers not to depend too heavily on verbal skills when evaluating performances.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$1.15 (no ED as yet).

Modeling and Imitation Learning in Young Children, by Susan B. Thomas.

Abstracts that deal with modeling and imitation learning are grouped in five subtopics: (1) characteristics of the model and situation, (2) modeling of aggressive responses, (3) learning roles, (4) learning values and attitudes, and (5) acquisition of various concepts and skills. Each section has an introduction discussing some of the issues of social learning.

Curriculum Lab., 1210 W. Springfield, Champaign, Illinois 61820. \$2.25 (no ED as yet).

EDUCATIONAL MANAGEMENT

School District Reorganization, by Ian Templeton. Educational Management Review Series Number 12.

Analysis of literature on school district reorganization, including variables affecting redistricting, implementation procedures, and forces opposing reorganization.

Single copies free on request from the Clearinghouse.

School size, by Ian Templeton. Educational Management Review Series Number 13.

Review of documents on the effects of school size on costs, student achievement, and educational quality.

Single copies free on request from the Clearinghouse.

Student Rights and Responsibilities, by Ian Templeton. Educational Management Review Series Number 14.

Examines recent court litigation on student rights and reviews literature on student codes and administrative legal rights and concerns.

Single copies free on request from the Clearinghouse.

Administrator Evaluation, by Terry Barraclough. Educational Management Review Series Number 15.

Analyzes documents on the reasons for and uses of administrator evaluation, commenting on present evaluation philosophies and suggesting new instruments and procedures.

Single copies free on request from the Clearinghouse.

Nongraded Schools, by Warren Mellor. Educational Management Review Series Number 16.

Presents reasons for, problems of, and advice for starting a nongraded school program and emphasizes the central role of the administrator in such programs.

Single copies free on request from the Clearinghouse.

Management Styles, by Terry Barraclough. Educational Management Review Series Number 17.

Identifies various managerial styles, cites determinants and effects of management style, and recommends an adaptive, teacher-centered style.

Single copies free on request from the Clearinghouse.

The Supervisory Role, by Warren Mellor. Educational Management Review Series Number 18.

Acknowledges that the quality of interpersonal relationships affects the outcome of teacher-supervisor encounters, suggests a supportive style of supervision, and examines the supervisory role in instructional improvement.

Single copies free on request from the Clearinghouse.

Relocatable Classrooms, by Alan M. Baas. Educational Facilities Review Series Number 10.

Describes types of relocatable structures, temporary space needs, and creative uses for relocatable facilities.

Single copies free on request from the Clearinghouse.

Science Facilities, by Alan M. Baas. Educational Facilities Review Series Number 11.

Relates science facility designs and teaching techniques and reviews specialized facilities studies and planning information. Single copies free on request from the Clearinghouse.

Financing School Construction, by Philip K. Piele. Educational Facilities Review Series Number 12.

Examines the National Educational Finance Project and Educational Facilities Laboratories, Inc., analyses of the problems of defeated bond issues and inflated building costs.

Single copies free on request from the Clearinghouse.

Libraries and Instructional Materials Centers, by Alan M. Baas. Educational Facilities Review Series Number 13.

Articles discuss instructional materials center (IMC) design in relation to various instructional techniques and school objectives.

Single copies free on request from the Clearinghouse.

Physical Education Facilities, by Alan M. Baas. Educational Facilities Review Series Number 14.

Offers design and construction information for both indoor and outdoor physical education facilities, including gymnasiums, wide-span and air-supported structures, playing fields, tracks, and swimming pools.

Single copies free on request from the Clearinghouse.

Luminous Environments, by Alan M. Baas. Educational Facilities Review Series Number 15.

Explains some biological effects of light, summarizes general lighting principles related to visual task performance, discusses natural and artificial lighting, and reports trends in luminous design.

Single copies free on request from the Clearinghouse.

Acoustical Environments, by Alan M. Baas. Educational Facilities Review Series Number 16.

Alerts educators to basic principles of sound transmission and control and gives information on techniques for reducing unwanted noise and evaluating acoustical conditions.

Single copies free on request from the Clearinghouse.

Thermal Environments, by Alan M. Baas. Educational Facilities Review Series Number 17.

Surveys documents concerning climate control, integrated thermal and luminous systems, total energy systems, and current trends in school air conditioning.

Single copies free on request from the Clearinghouse.

Site Selection, by Alan M. Baas. Educational Facilities Review Series Number 18.

Identifies typical site standards and their relationship to site selection techniques, and describes methods for predicting land costs, establishing attendance areas and integrating school locations with city planning.

Single copies free on request from the Clearinghouse.

New Approaches to Recruitment and Selection of Educational Administrators, by Robert T. Stout. ERIC/CEM State-of-the-Knowledge Series, Number 18.

Explains why different kinds of administrators are needed for today's schools and describes new practices for recruitment and selection of such administrators.

University Council for Educational Administration, 29 West Woodruff Avenue, Columbus, Ohio 43210. \$2.00, quantity discounts.

Collective Negotiations and the Administrator. ERIC Abstracts Series, Number 21.

Includes resumés of documents previously announced in *RIE* on collective negotiations and the school administrator.

National Academy for School Executives, 1801 North Moore Street, Arlington, Virginia 22209. \$2.00, quantity discounts.

Alternative Schooling: New Patterns in Education. ERIC Abstract Series, Number 22.

Includes resumés of documents previously announced in *RIE* on alternative, experimental, and community schools.

National Academy for School Executives, 1801 North Moore Street, Arlington, Virginia 22209. \$2.00, quantity discounts.

Assessing Educational Innovations. ERIC Abstracts Series, Number 23.

Includes resumés of documents previously announced in *RIE* on assessing educational innovations.

National Academy for School Executives, 1801 North Moore Street, Arlington, Virginia 22209. \$2.00, quantity discounts.

Open Space Schools. ERIC Abstracts Series, Number 24.

Includes resumés of documents previously announced in *RIE* on open plan schools.

National Academy for School Executives, 1801 North Moore Street, Arlington, Virginia 22209. \$2.00, quantity discounts.

EDUCATIONAL MEDIA AND TECHNOLOGY

Who is Talking to Our Children?, edited by Peggy Charren and Evelyn Sarson.

Published cooperatively by ERIC at Stanford and Action for Children's Television (ACT), this 64-page publication is the official transcript of the Third National Symposium on Children and Television sponsored by ACT, Yale University, the New Haven Creative Arts Workshop and the Poynter Fellowship Program. It includes the major keynote speeches, proceedings and workshops and panels, and other addresses. Remarks of such educators as Roger Fransecky, University of Cincinnati; Fred Rogers of the Public Broadcasting System; and Robert Louis Shayon of the Annenberg School of Communication, University of Pennsylvania, are included.

Box E, School of Education, Stanford University, Stanford, California 94305 or from ACT, 46 Austin Street, Newtonville, Massachusetts 02160. \$5.00 (ED number not yet available).

The Invisible Medium: The State of the Art of Microform and a Guide to the Literature, by Frances G. Spigai.

This extensive state-of-the-art publication is a joint product of the Stanford Clearinghouse and the Clearinghouse on Library and Information Sciences. It covers technological events, the medium of microfilm, formats of microfilm, microform equipment, a guide to the literature, and user studies.

Box E, School of Education, Stanford University, Stanford, California 94305. \$3.50. Discounts of 10 percent for over 25 copies, and 20 percent for over 50 copies. Check must be included with order. Also available from ERIC/CLIS, ASIS, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036. (ED number not yet available.)

1973 Research Abstract Kit for the Convention of the Association for Educational Communications and Technology.

This Clearinghouse-produced kit includes 20 research abstracts of paper presented at the Association for Educational Communications and Technology Convention (April 1973), a list of titles and authors of the papers, and other ERIC materials. This folder is produced each year by the Clearinghouse.

Single copies free on request from the Clearinghouse. Not available through EDRS.

Media and the Disadvantaged. Instructional Technology as the Equalizer for Disadvantaged Students.

This 101-page extensive publication is the result of a project of the Stanford Clearinghouse funded as a mini-proposal by Central ERIC. Representatives from seven media-oriented instructional programs for disadvantaged students met with staff members of the Clearinghouse to discuss the philosophy underlying their efforts, means of developing instructional objectives and strategies, criteria for the selection of materials, and ways of evaluating performance. Topics discussed include the merits of locally produced materials versus those of commercial products, evaluation of the affective domain, role playing by children, the use of radio, the role of the teacher, factors influencing the choice of media, traits of culturally different learners, and an inventory of priorities as seen by those working in the field. A glossary of selected terms, descriptions of the seven model projects, and the results of a survey of chief state school officers used to identify such projects are also included.

Box E, School of Education, Stanford University, Stanford, California 94305. \$5.00. Discounts of 10 percent for over 25 copies and 20 percent for over 50 copies. Check must be included with order. (ED number not yet available.)

Educational Simulation/Gaming, by Paul A. Twelker and Ken Layden.

Because of the large quantity of requests for this publication first issued in August 1972, the School of Education at Stanford has just reissued this paper. It includes a simple introduction to the techniques of simulation and gaming. Several simulation/gaming applications are differentiated: non-simulation games, planning exercises, interpersonal simulation games, and large system simulation games. A chart compares various simulation/gaming applications for a large number of learning characteristics. An annotated bibliography lists both basic references and material for more experienced users of simulating/gaming. A directory gives the names and addresses of over 50 centers of activity, including each center's status, activities, level and focus.

EDRS — ED 064 955; MF \$0.65, HC \$3.29. Also from Box E, School of Education, Stanford University, Stanford, California 94305. \$1.50. Discounts of 10 percent for over 25 copies and 20 percent for over 50 copies. Check must be included with order.

Educational Radio: The Fifty-Year-Old Adolescent. ERIC/EBR Annual Review Paper, by James Robertson and Gerald G. Yokom.

This 11-page paper appeared in the April 1973 issue of *Educational Broadcasting Review*. It details impressions gathered by the authors from visits to 181 non-commercial educational radio stations throughout the United States. Some of these impressions: Contrary to the dismal expectations prevalent in the 1950's, educational radio has not only

survived the phenomenal growth of educational television, but has shown unmistakable signs of health and maturity. Though some stations are still groping to overcome problems, others have moved steadily toward the goal of wider and better service for the community. Local community needs have gained priority in programming, and because of this, new sources of financing are being revealed.

Box E, School of Education, Stanford University, Stanford, California 94305. \$1.50. Discounts of 10 percent for over 25 copies and 20 percent for over 50 copies. Checks must be included with orders. (ED number not yet available.)

The Best of ERIC: Recent Trends in Computer Assisted Instruction, by Dr. Richard E. Clark.

This 15-page bibliography (annotated) is a "Best of ERIC" collection. The current paradox between the increasing interest in the utilization of computer-assisted instruction (CAI) and the decreasing financial support from the Federal Government is briefly surveyed in the introduction of this annotated bibliography. The author also discusses the major problems that are now prevalent in CAI utilization: the lack of specialized programming and the scarcity of research based knowledge. An annotated bibliography of some 40 recent articles is divided into categories of CAI planning and utilization, case studies of utilization, attitudes toward CAI, cost effectiveness studies, research trends in student-CAI interaction and future prospects and policies.

Box E, School of Education, Stanford University, Stanford, California 94305. \$1.50. Discounts of 10 percent for over 25 copies, and 20 percent for over 50 copies. Check must be included with order. (ED number not yet available.)

HIGHER EDUCATION

Productivity: Burden of Success, by William Toombs.

This report examines the meanings of productivity outside the academic setting and relates findings to current management and planning approaches used by higher education administrators.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. \$2.00 prepaid.

University-City Relations: From Coexistence to Cooperation, by Bernard H. Ross.

This report examines aspects of university-city relations and suggests ways that productive interaction may take place between local government and institutions of higher education.

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American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. \$2.00 prepaid.

Comparative Higher Education, by Philip Altbach.

This report reviews research on comparative higher education,

including a brief historical overview and highlights areas that impact on a transnational exchange of higher education programs and ideas.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. \$2.00 prepaid.

JUNIOR COLLEGES

A Basic Bibliography of Books, Journals and References on the Community/Junior College.

Ten-page guide to colleges that wish to create or up-date a professional library.

Single copies free on request from the Clearinghouse.

Bibliography of ERIC Materials Relevant to Reading and Reading Programs in Community/Junior Colleges.

Computer-generated bibliography with abstracts.

Single copies free on request from the Clearinghouse.

Community Services.

Bibliographical essay based on current materials from the ERIC Junior College collection.

Single copies free on request from the Clearinghouse.

Collective Bargaining in Community Colleges.

Reprints of selected material relevant to the current status of collective bargaining in two-year colleges.

Single copies free on request from the Clearinghouse.

A Brief Review of Instructional Objectives for Junior College Courses.

Overview, with bibliography, including the list of sample objectives for specific courses available from ERIC.

Single copies free on request from the Clearinghouse.

Current Issues in Vocational-Technical Education.

Short discussion, with reference to ERIC materials, of problem areas facing two-year colleges.

Single copies free on request from the Clearinghouse.

Columns prepared by the Clearinghouse are regular features in *Change Magazine* and *New Directions for Community Colleges*, a new quarterly source book from Jossey-Bass. Subscription blanks to both journals are available from the Clearinghouse. Reprints of the following articles are available from the Clearinghouse free of charge.

Reprints from Change Magazine

"Evaluating Faculty" by Arthur M. Cohen and Florence B. Brawer. (Sept. 1972)

"Prospects for Middle Management" by John Lombardi. (Oct. 1972)

"Junior College Growth" by Martin J. Cohen. (Nov. 1972)

"Dealing With the Enrollment Depression" by Richard C. Richardson, Jr. (Dec./Jan. 1972-73)

"The Thirteenth Year" by Florence B. Brawer. (Feb. 1973)

"A New Look at Vocational Education" by John Lombardi. (March 1973)

"The Black Professional in the Community College" by Donald H. Godbold, Andrew Goodrich and William Moore, Jr. (April 1973)

- "The Administrator and Institutional Research" by Ben K. Gold. (May 1973)
- "The College's Impact on Local Economy" by James W. Selgas, John C. Saussy, and Clyde E. Blocker. (June 1973)
- "Proprietary Schools—A Challenge to Community Colleges?" by Elwood A. Shoemaker. (July/Aug. 1973)

"Further Information and Assistance"

Reprints from *New Directions For Community Colleges*

Toward a Professional Faculty, number 1, Spring 1973.

LANGUAGES AND LINGUISTICS

Extracurricular Foreign Language Activities: ERIC Focus Reports on the Teaching of Foreign Languages, Number 29, by Heidi Campbell.

Discusses the general decline of language clubs and the changing philosophy behind extracurricular activities, giving suggestions for new kinds of activities which provide more interesting and relevant cultural experiences for today's student.

MLA Publications Center, 62 Fifth Avenue, New York, New York, 10011. Order No. R29, \$0.50. (ED number not yet available.)

Addresses of Embassies, Consulates and Educational and Information Offices of Interest to Foreign Language Teachers, compiled by Fannetta Gordon.

A directory listing embassies, consulates, and educational and information offices which might help foreign language teachers in the teaching of culture. Arranged by principal language.

MLA/ERIC, 62 Fifth Avenue, New York, New York 10011. Free of charge. (ED number not yet available.)

ERIC Documents on the Teaching of Foreign Languages: List Number 10, compiled by Carolyn Monka and Dorothy Gregory.

Bibliography of all ERIC documents relevant to foreign language education which appeared in RIE from May 1972 through September 1972.

Published originally in *Foreign Language Annals*, Vol. 6 (March 1973), pp. 392-409. Reprints available from the Clearinghouse on request. (ED number not yet available.)

LIBRARY AND INFORMATION SCIENCES

The Purpose of the American Public Library in Historical Perspective: A Revisionist Interpretation, by Michael H. Harris.

The intention of this essay is to serve as a guide to the literature treating the historical development of the American public library. It also provides a selective analysis of the literature dealing with the role of the public library, and a selected bibliography.

EDRS — ED 071 668; MF \$0.65, HC \$3.29.

Trends in Modern Subject Analysis with Reference to Text Derivative Indexing and Abstracting Methods: The State of the Art, Keith C. Wright.

Briefly reviews the information explosion of the last thirty years and the various attempts made to organize that information in new ways. The author sums up the state of the art in automatic indexing by concluding that human intellectual effort is still required in indexing. The computer is viewed as a valuable assistant in that intellectual effort.

EDRS — ED 073 787; MF \$0.65, HC available from Science Associates/International, Inc., 23 East 26th Street, New York, New York 10010 as *INFORMATION*. Part 2. Reports. Bibliographies, Vol. 1, No. 5, September-October 1972. \$7.50.

The Invisible Medium: The State of the Art of Microform and a Guide to the Literature, by Frances G. Spigai.

Geared particularly for libraries and information centers, this paper describes the many types of microforms, explains the differences between each type, and discusses the uses, benefits, and drawbacks of the various microforms.

American Society for Information Science, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036 and ERIC/EM, Stanford University, Stanford, California 94305. \$3.50. EDRS — ED number not yet available; MF \$0.65, HC \$3.29. LI 004 182.

Bibliography of Basic Textbooks on Information Science, by Jack Belzer.

Bibliography of textbooks currently in use in courses on information science.

Science Associates/International, Inc., 23 East 26th Street, New York, New York 10010 as *INFORMATION*. Part 2. Reports. Bibliographies, Vol. 1, No. 6, November-December 1972. \$7.50. EDRS — ED number not yet available; MF \$0.65, LI 004 287.

ERIC Products 1971-1972. An Annotated Bibliography of Information Analysis Publications of the ERIC Clearinghouses, edited by Mary F. McCord.

Annotated listing of the information analysis publications produced by all the ERIC Clearinghouses during 1971-72.

EDRS — ED number not yet available; MF \$0.65, HC \$3.29. LI 004 339.

READING AND COMMUNICATIONS SKILLS

Black Dialects and Reading, edited by Bernice Cullinan.

A collection of articles that examine the complex inter-relationships among black dialect, oral language, and reading and offer teachers practical suggestions based on the most recent research on reading and language instruction in order to help them become equipped to handle some of the problems their dialect-speaking students encounter.

Contact Clearinghouse for further information.

The Politics of Reading, edited by Sister Rosemary Winkeljohann.

In the article, "The Politics of Reading," Neil Postman argues that print is no longer the dominant medium of communication in our culture and the fact that the school is acting as if it were has broad political implications. Eight reading

experts, including leaders in professional organizations, reading specialists, a teacher, and a publisher, then respond to Postman's urging for reevaluation of the role of reading instruction in education. The last paper is a response by Postman to his colleagues' arguments.

IRA and NCTE.

Miscue Analysis, edited by Kenneth S. Goodman.

Goodman explains miscue analysis, which is premised on the fact that errors children make in reading provide specific and general insights about the learners' strengths and weaknesses. Other authors discuss uses of miscue analysis in the classroom and with children from different language backgrounds, as well as its applications to writing instructional materials and teacher training.

NCTE.

Aids to Curriculum Planning: English Language Arts K-12, compiled by Charles and Nancy Neff.

These excerpts are examples of seven areas included in curriculum guides—philosophy, objectives, language, composition, media, reading and literature, and evaluation—and were chosen because they were readable, adaptable, efficient, and dependable. The collection, edited by Bernard O'Donnell, Director of ERIC/RCS is an attempt to provide curriculum builders with models for the "Criteria for Evaluating and Building Curriculum" developed by the NCTE Committee on Curriculum Bulletins.

Contact Clearinghouse for further information.

Recommended English Language Arts Curriculum Guides K-12, edited by Sister Rosemary Winkeljohann.

Annotated recommended curriculum guides reviewed by the NCTE Committee on Curriculum Bulletins, giving information on the scope, content, and approach of each guide. Lists guides recommended in 1973, 1972, and 1971, and enumerates the criteria on which the recommendations are based.

Contact Clearinghouse for further information.

ERIC First Analysis, by William M. Reynolds and John Sexton.

A sixty-six page booklet that summarizes and analyzes the issue of poverty, and includes a selected, annotated bibliography.

Clearinghouse. \$0.25 each; \$0.15 for quantities of ten or more, prepaid.

1973-1974 National High School Debate Topic: Primary Resources, by William M. Reynolds.

A microfiche collection (ten fiche), containing more than 900 pages of copy, has been collected. Access to a microfiche reader available in most libraries, is necessary in order to use this collection.

Clearinghouse. \$3.50, prepaid.

Time-Compressed Speech, by Gerald M. Goldhaber.

A basic bibliography.

Clearinghouse (Speech).

ERIC Documents on Methods and Materials for Adult Reading Instruction, compiled by Turee Olson.

A basic bibliography.

Clearinghouse.

REPRINTS

Reprints of the following journal articles are available from the Clearinghouse.

Reprints from Elementary English

113—Standard or Nonstandard (February 1973)

117—Creative Writing (April 1973)

118—World Literature for World Understanding (March 1973)

Reprints from English Journal

115—Film Study in the High School Curriculum (April 1973)

116—Lessons of Silence in the English Classroom (March 1973)

Reprints from English Education

121—Performance Based Teacher Education (May 1973)

Reprints from The Reading Teacher

120—An Alternative Plan for Education (May 1973)

123—Standardized Tests: Selection and Interpretation (April 1973)

Reprints from Journal of Reading

122—International Adult Education (April 1973)

RURAL EDUCATION AND SMALL SCHOOLS

Migrant Education, A Selected Bibliography—Supplement No. 3, compiled by ERIC/CRESS.

Superintendent of Documents, GPO, Washington, D.C. 20402. Stock number available from Clearinghouse.

Career Education Handbook for Rural School Administrators, by Everett D. Edington and Howard Conley.

Capitol Publications, Inc., Suite G-12, 2430 Pennsylvania Avenue, N.W., Washington, D.C. \$4.00.

Help Begins at Home, by J. E. Biglin.

A slide/cassette presentation designed to provide American Indian parents with practical suggestions in regards to preparing their pre-school children for success at school. Time: English — 17 minutes, Navajo — 30 minutes, Other Indian Languages (available on special order basis).

Northern Arizona University, Box 5774, Flagstaff, Arizona 86001. \$10.95.

Passing of the Sun, by J. E. Biglin.

A slide/cassette presentation which provides information concerning school operations, administration, and parental involvement with the school. Time: English — 17 minutes, Navajo — 30 minutes, Other Indian Languages (available on special order basis).

Northern Arizona University, Box 5774, Flagstaff, Arizona 86001. \$10.95.

SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION

A Review of Research on Secondary School Mathematics, by Marilyn N. Suydam.

Reviews 1550 research studies on secondary school mathematics education published between 1930 and 1970. Discussion is organized around themes: planning for instruction, attitudes and related factors, content, individualizing instruction, instructional materials and media, and teacher education. Includes a bibliography of the 1550 studies.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$3.50.

Investigations in Mathematics Education, Vol. 5, No. 3, 1972, edited by Jon L. Higgins.

Contains abstracts of research articles and documents. Includes critical analysis of each report. Abstracts are prepared by leading mathematics education researchers.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. Subscription — \$6.00 per year, \$1.75 single copy.

Special Bibliography 6 — Research in Earth Science Education: An Annotated Bibliography, by Victor J. Mayer and Charles Wall.

Annotated listing of books, articles, and other references on research in earth science education. Organized by: elementary, secondary, and college levels; qualifications for teachers; and museums and planetariums as educational institutions.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$0.75.

Language Factors in Learning Mathematics, by Lewis R. Aiken, Jr.

Discusses the relationship of verbal factors to mathematics achievement and reviews research from 1930 to present. Considers the effects of verbalization in the mathematics learning process, mathematics functioning as a language, readability of mathematics materials, verbal ability and problem solving, and other factors. Includes an extensive bibliography.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$1.00.

A Review of Research Related to Environmental Education, by Robert E. Roth and Stanley L. Helgeson.

Identifies and critically reviews primarily post-1950 research on environmental education, and identifies areas for further research. Includes 94 selected studies on attempts at objective evaluation of programs, outcomes, attitudes, and administrative procedures related to secondary school, college, or adult levels.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$1.50.

Investigations in Mathematics Education, Vol. 5, No. 4, 1972, edited by Jon L. Higgins.

Contains abstracts of research articles and documents. Includes critical analysis of each report. Abstracts are prepared by leading mathematics education researchers.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. Subscription — \$6.00 per year, \$1.75 single copy.

National Association for Research in Science Teaching, 46th Annual Meeting, Abstracts of Presented Papers, edited by Stanley Helgeson and Patricia Blosser.

Contains abstracts of research reported at the NARST meeting. Includes reports of symposia, discussion groups, and research on such topics as simulation techniques, pictorial communication, concept learning, test construction, teacher education, instructional procedures, teaching strategies, learning theory, teacher behaviors and characteristics, research in other countries, curriculum, and evaluation.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$3.00.

Investigations in Mathematics Education, Vol. 6, No. 1, 1973, edited by Jon L. Higgins.

Contains abstracts of research articles and documents. Includes critical analysis of each report. Abstracts are prepared by leading mathematics education researchers.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. Subscription — \$6.00 per year, \$1.75 single copy.

A Review of British Science Curriculum Projects, Implications for Curriculum Developers, by A. M. Lucas and D. G. Chisman.

Describes Nuffield, Schools Council, and other British curriculum development projects in science. Includes content, teaching techniques, materials, and other aspects, as well as a discussion of implications for the United States.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$3.50.

Ability and Creativity in Mathematics, by Lewis R. Aiken, Jr.

The relationships of intelligence, achievement, age, sex, heredity, and psychosocial factors to mathematical creativity are carefully reviewed and discussed.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$1.25.

Simulation Technique in the Teaching and Testing of Problem-Solving Skills. Occasional Paper Series — Science Paper 8, by Christine McGuire.

Reviews research related to the teaching and testing of problem solving skills and provides recommendations for future efforts.

Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. \$0.75.

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

Free/Open Schools, by Nicholas Helburn.

A brief comparison of "traditional" and "open" (alternative, free) schools along several different continua: custodial and managerial aspects, social status and social relations, indoctrination and value formation, and education. Following this comparison is an examination of some common problems and the future of free/open schools, and a lengthy bibliography of readings on free/open education.

SSEC Publication Number 154, price not assigned. (ED number not yet available.) SO 005 850.

Learning With Games, by Cheryl Charles and Ronald Stadsklev.

A handy guidebook to simulations and games for social studies instruction, including analyses of 70 social studies simulations/games, an extensive list of sources and resources on the development and use of educational simulations and games, and an "Abbreviated Games and Simulations Guide" briefly describing over 250 simulations and games available from 80 producers.

SSEC Publication Number 150, \$4.95. (ED number not yet available.) SO 005 848.

Research in Social Studies/Social Science Education: Introduction, Analyses and Review of Research, by James Oswald.

A compilation of 12 reviews of research in social studies education which appeared in publications of the American Educational Research Association and of the National Council for the Social Studies, from 1941 to 1970. Most of the 1200 investigations reported during this period are reviewed in this volume, which is extensively indexed by subject, author, and title of the studies.

SSEC Publication Number 158, price not assigned. (ED number not yet available.) SO 006 090.

TEACHER EDUCATION

Students' Rights: A Guide to the Rights of Children, Youth, and Future Teachers, by Martin Haberman.

This paper treats in detail the rights of students in elementary and secondary schools and in programs of teacher education. Court decisions are cited extensively. The final section presents a bill of rights for future teachers.

Association of Teacher Educators. EDRS - (ED number not yet available); MF \$0.65, HC \$3.29.

Concepts of Teacher Centers, by Bruce R. Joyce and Marsha Weil.

Pertinent literature is reviewed and three styles of operating a teacher center are detailed. Emphasis is placed on the origins, themes, and methods of operation and on future plans for centers.

EDRS - ED (to be announced in August issue of *RIE*); MF \$0.65, HC \$3.29.

Current Research and Perspectives in Open Education, edited by D. Dwain Hearn, Joel L. Burdin, and Liliap Katz.

This publication is an edited version of selected presentations and panels of the national research conference on open education sponsored in January 1972 by AAEKNE.

American Association of Elementary-Kindergarten-Nursery Educators, 1201 16th Street, Washington, D.C. 20036. Order number 281-08898, \$5.00. EDRS - ED (to be announced in September issue of *RIE*); MF \$0.65, HC \$6.58.

Competency-Based Education: The State of the Scene, by Allen A. Schmieder.

This outline covers the roots of the CBE movement, distinguishing characteristics, resources, issues, a glossary for CBE, and a profile of CBE by state.

EDRS - ED 073 046; MF \$0.65, HC \$3.29.

In-Service Education for Rural School Personnel, edited by Joel L. Burdin and Lorraine Poliakoff.

Three models for rural in-service teacher education programs are detailed, along with programs already in operation.

EDRS - ED 073 082; MF \$0.65, HC \$6.58.

Career Education—A Humanistic View, by Robert J. Nash and Russell M. Agne.

TESTS, MEASUREMENT, AND EVALUATION

Educating Those Who Teach Reading, by Paul B. Diederich.

This is a digest and interpretation of some of the main findings reported in Chapter V, "Nature and extent of current practices in educating those who teach reading" by J. Richard Harsh in *The information base for reading: A critical review of the information base for current assumptions regarding the status of instruction and achievement in reading in the United States*: Chapter V is based on a survey of the literature published between 1960 and 1970 which would be useful in answering the following questions: 1) How are teachers of reading prepared and selected for their task? 2) What are the state education code directives for the teaching of reading? 3) What are the state certification requirements for reading teachers and specialists? 4) What preparation on the part of reading teachers or specialists is required by school districts? and 5) What is the relationship between teacher preparation, teacher characteristics, and student achievement in reading? (The full report is available through ERIC, ED 054 922.)

Single copies free on request from the Clearinghouse. ED 072 118.

State Educational Assessment Programs 1973 Revision, by the ERIC Clearinghouse on Tests, Measurement and Evaluation and Educational Testing Service in collaboration with the Education Commission of the States.

The results of a 1973 survey of the assessment activities of the 50 states, the District of Columbia, Puerto Rico and the Virgin Islands are reported, summarized, and analyzed.

Dr. S. Donald Melville, Educational Testing Service, Princeton, New Jersey 08540. \$4.00.

Research 1960-1970 on the Reading Problem in the United States, by Paul B. Diederich.

A digest and interpretation of some of the main findings reported in Chapter III, "The reading problem in the United States" by Abraham Carp in *The information base for reading: A critical review of the information base for current assumptions regarding the status of instruction and achievement in reading in the United States*, the final report of a study directed by Reginald Corder of Educational Testing Service for the U.S. Office of Education. (The full report is available through ERIC, ED 054 922.) Chapter III of the report consists of a survey of the literature published in the United States between 1960 and 1970 to determine the extent of the reading problem in the country and to identify, analyze, and summarize existing survey and test data which indicate the reading ability of various populations in relation to "individual and social needs."

Single copies free on request from the Clearinghouse. ED 072 116.

Research 1960-1970 on Methods and Materials in Reading, by Paul B. Diederich.

This bulletin presents an analysis and interpretation of some of the main findings in Chapter IV, "Survey of the literature on methods and materials in reading," by Martha J. Maxwell and George Temp in *The information base for reading: A critical review of the information of current assumptions regarding the status of instruction and achievement in reading in the United States*. Chapter IV of the survey is directed towards the following questions: 1) What methods, materials, approaches, equipment, and procedures are used to teach reading and to what extent? 2) What methods of reading instruction are built into essentially different pools of basis knowledge? 3) How much time and what resources are expended directly on developmental and remedial reading instruction? and 4) What relationships between methods of reading achievement of the various subgroups of the population can be shown? (The full report is available through ERIC, ED 054 922.)

Single copies available on request from the Clearinghouse. ED 072 115.

1972 AERA Conference Summaries: Educational Evaluation, by Joan S. Beers.

A review of the 50 papers on educational evaluation presented at the 1972 meeting of the American Educational Research Association (AERA).

Single copies free on request from the Clearinghouse. ED 073 144.

1972 AERA Conference Summaries: Criterion Referenced Measurement, by Frederick B. Davis.

A summary of eight papers on criterion reference testing presented at the 1972 meeting of AERA.

Single copies available on request from the Clearinghouse. ED 073 143.

1972 AERA Conference Summaries: Educational Statistics, by Douglas A. Penfield.

A review of the 30 papers on educational statistics presented at the 1972 meeting of AERA.

Single copies free on request from the Clearinghouse. ED 073 142.

1972 AERA Conference Summaries: Test Development, Interpretation and Use, by Robert L. Ebel.

The 54 papers on test development, interpretation and use presented at the 1972 AERA meeting are summarized.

Single copies available on request from the Clearinghouse. ED 073 041.

Focusing on Measures of College Environments, by Leonard L. Baird.

This review article deals with several different approaches which have been used to obtain information related to college environments. The article briefly traces the fifteen-year history of such measures and focuses in detail on three approaches.

Single copies available on request from the Clearinghouse. ED 075 444.

VOCATIONAL AND TECHNICAL EDUCATION

Career Education Practice, by Wesley E. Budke, Glenn E. Bettis, and Gary F. Beasley.

This document is written to provide educators with a brief overview of career education in terms of what it is, the models being sponsored by the National Institute for Education, example of locally developed programs, and possible concerns and implications for program development. The primary intent of the publication is to provide "food for thought" to those persons involved in developing career education programs.

Superintendent of Documents (HE 18.11/2:65) \$1.25. EDRS — ED 073 226; MF \$0.65, HC \$3.29.

ERIC Instructional Package for Vocational Educators, by David H. Miller and Gary F. Beasley.

The ERIC instructional package is designed to serve as a self-study unit or an instructional guide to teach potential ERIC users how to efficiently and effectively utilize the system. The functions of *Research in Education* (RIE), *Current Index to Journals in Education* (CIJE), *Abstracts of Instructional Materials in Vocational and Technical Education* (AIM), and *Abstracts of Research Materials in Vocational and Technical Education* (ARM) are explored with the user gaining first-hand experience in retrieving information. The user is moved systematically through the development of a problem statement, first determining the parameters of the problem and then outlining the search strategy. The problem statement provides the searchers with the information upon which to select terms to be used in conducting a subject index search. Instruction is provided in the use of the *Thesaurus of ERIC Descriptors* in converting retrieval terms to ERIC terminology. Transparency masters are available for group instruction.

ERDS — ED 073 229; MF \$0.65, HC \$3.29. Also from Product Utilization Section, The Center for Vocational and Technical Education, 1960 Kenny Road, Columbus, Ohio 43210. (Instructional Package \$5.00 each; Transparency Masters \$4.00 set)

Guide to State Information Resources, by David H. Miller.

This compilation of state information resources profiles identifies the names and addresses of selected state information dissemination agencies, lists the locations of ERIC microfiche collections, as well as the availability of computer software installations for searching ERIC files in each state. Individual information resources profiles should be valuable to users seeking sources of information on vocational and technical education within their state.

EDRS — ED 072 241; MF \$0.65, HC \$6.58.

Review and Analysis of Instructional Materials for Manufacturing, by Rex A. Nelson and Lewis R. Selvidge, Jr.

A comprehensive study of the manufacturing industry as a part of the industrial arts curriculum area has become widely accepted in the past decade. The resultant demand for manufacturing related curriculum and instructional materials has stimulated program development. The authors cite examples of significant operational programs and purpose criteria for identifying and evaluating curriculum. This publication should aid curriculum specialists, state and local supervisors, and teachers of industrial education in assessing the current status of curriculum and instructional materials development for manufacturing.

Superintendent of Documents (HE 18.11/2:66) \$0.60. EDRS — ED 074 207; MF \$0.65, HC \$3.29.

A Guide for Local Program Evaluation, by Richard H. Edsall.

This publication is designed to aid educators in organizing and conducting evaluation programs for vocational and technical education. The author identifies ten steps or guidelines to serve as a skeletal structure in determining evaluation procedures, evaluation committee organization, and the collection and utilization of data. An accompanying bibliography provides a list of original sources for the reader wishing a more in-depth treatment of the subject.

EDRS — ED (to be announced in October issue of *RIE*). Also from Product Utilization Section, The Center for Vocational and Technical Education, 1960 Kenny Road, Columbus, Ohio 43210. \$2.50 each. VT 019 646.

Local Vocational and Technical Education Supervision, by Darrell L. Parks.

This publication is designed to assist local supervisors of vocational and technical education programs in clarifying their role and function in improving instruction. Its compact nature presents only major ideas and guidelines in performing the supervisory function, with a bibliography for those desiring to explore in greater depth. The author identifies specific duties and responsibilities of supervisors and discusses the elements of instruction, guidance, research, budgeting, public relations, and evaluation as they relate to the supervisory process.

EDRS — ED (to be announced in October issue of *RIE*). Also from Product Utilization Section, The Center for Vocational and Technical Education, 1960 Kenny Road, Columbus, Ohio 43210. \$2.50 each. VT 020 025.

Instructional Materials for Cosmetology and Barbering, by Olive P. Scott.

This publication should benefit curriculum development specialists and local supervisors of trade and industry in assessing curriculum and instructional materials and assist teachers in improving existing programs in cosmetology and barbering. The author provides an overview of current state licensing regulations and basic curriculum requirements. An annotated bibliography is provided in the areas of basic cosmetology, chemistry, grooming, hairstyling and hair-shaping, wigs and hairpieces, and other related topics.

EDRS — ED (to be announced in September issue of *RIE*). Also from Product Utilization Section, The Center for Vocational and Technical Education, 1960 Kenny Road, Columbus, Ohio 43210. \$2.50. VT 019 645.

Cooperative Education: Answers to Questions on Vocational and Technical Education, by Joel H. Magisos and Roy L. Butler.

This awareness brochure provides answers to critical questions related to cooperative vocational education and directs the user to publications which discuss the subject more thoroughly. The brochure should be useful to state leaders, supervisors of vocational education, teacher educators, local administrators, local directors, teachers, and counselors.

EDRS — ED 074 227; MF \$0.65, HC \$3.29.

Disadvantaged Youth: Answers to Questions on Vocational and Technical Education, by David H. Miller and Suzanne Berry.

This awareness brochure provides answers to critical questions related to understanding and educating the disadvantaged and directs the user to publications which discuss the subject more thoroughly. The brochure should be useful to state leaders,

supervisors of vocational education, teacher educators, local administrators, local directors, teachers, and counselors.

EDRS — ED 074 228; MF \$0.65, HC \$3.29.

Management Systems: Answers to Questions on Vocational and Technical Education, by J. David McCracken and Robert B. Harris.

This awareness brochure provides answers to critical questions related to management of vocational and technical education programs and directs the user to publications which discuss the subject more thoroughly. The brochure should be useful to state leaders, teacher educators, local administrators, and local directors.

EDRS — ED 074 229; MF \$0.65, HC \$3.29.

ERIC REFERENCE TOOLS

RESEARCH IN EDUCATION

A monthly abstract journal of recently completed educational research reports, descriptions of exemplary programs, and other documents of interest to the educational community. Directed to school administrators, teachers and supervisors, school board members, commercial and industrial organizations, educational researchers, and the public, this journal contains:

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CURRENT INDEX TO JOURNALS IN EDUCATION

CJIE is the most complete guide for current awareness of all important educational periodical literature. Detailed indexing for articles in over 600 education and education-related journals are available in each issue. Over 17,000 articles are indexed yearly.

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- Semiannual and Annual Cumulations.

Current Index to Journals in Education:

Monthly	\$44.00
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JC

THE ERIC REPORT

NUMBER 3
MARCH-APRIL 1974

ERIC

research
in
education

THESAURUS
OF ERIC
DESCRIPTORS

EDUCATION OF COMMUNITY COLLEGE TEACHERS: MODELS OF
TEACHING PRACTICES
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THE ERIC REPORT

This issue of the ERIC Report highlights the continuing efforts being made to make the system current and helpful to its users. Changes in the Clearinghouses are described and an exciting new instructional package is announced. The basic tools of ERIC are carefully outlined and explained by a prominent librarian.

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HOW TO USE ERIC: A SKILL UTILIZATION PACKAGE

by ERIC Clearinghouse for Social Studies/Social Science Education

ERIC is becoming an important resource for the improvement of education. But its potential will not be realized unless steps are taken to train potential users in what the system has to offer, how to gain access to the relevant resources to the problems of special concern to them, and how to use the information in problem solving.

To date, ERIC Clearinghouses and other information centers have not been able to take an active role in information dissemination and utilization. Yet they are continually called upon to give presentations concerning the use of ERIC to various client groups. In the past, several ERIC Clearinghouses and others have developed pamphlets, filmstrips, slide/tapes, or other materials to help inform, motivate, and train potential clients. Many of these products were very good. However, some were limited in scope and application. At the ERIC Technical Conference, held in 1972 at the ERIC/ChESS offices in Boulder, Colorado, there was strong support for the development of one professional sophisticated program which would be available for use by all clearinghouses, teacher training institutions, school librarians, school faculty groups, or other individuals desiring to learn more about how to use ERIC. The project described here is directed toward meeting the need of helping those in the education community learn how to use ERIC.

During the past eight months, the staff of ERIC/ChESS has been developing an *ERIC Skill Utilization Package*.

PACKAGE CONTENT AND USES

The *Skill Utilization Package* introduces ERIC to a variety of users. The *Package's* primary purpose is to actively involve the user in learning about ERIC and its search tools. The *Package* has been designed so that it can be used for self instruction or with large or small groups.

As presently developed, the *Skill Utilization Package* provides the necessary materials and instructions for use. The *Package* includes: 1) Three filmstrip/cassettes which present first, an overview of the ERIC system and then, depending on the user, focus on aspects of an ERIC search. 2) A cassette and transparency masters which assist the user in taking action based on knowledge gained from searching for resources in the ERIC system. 3) Mock-up copies of the three main ERIC search documents, the *The Thesaurus of ERIC Descriptors*, *Research in Education*, (RIE), and *Current Index to Journals in Education*, (CIJE). All mock-ups are easily reproducible by the user. 4) Worksheets to assist the user in learning about ERIC procedures. 5) A Coordinator's Manual which gives instructions on using the entire *Skill Utilization Package*.

Because of the variety of client groups who can use the ERIC system, the *Skill Utilization Package* contains four levels of activities. Each level seeks to develop in the user a greater degree of sophistication in the use of ERIC. These levels are briefly described below.

LEVEL ONE AN INTRODUCTION TO ERIC

The primary purpose of this level is to orient those unfamiliar



with the ERIC system and to entice potential users to explore ERIC further. The format of this level is an eight minute filmstrip/cassette which is suitable for professional conferences, faculty meetings, college classes, library and clearinghouse visitor groups, and for individual viewing.

LEVEL TWO LEARNING TO USE RESEARCH IN EDUCATION

The purpose of this level is to help the user seek ERIC information at the most elementary level. The focus of Level Two is primarily on the use of *Research in Education*. The format for this level is a ten minute filmstrip/cassette, plus a set of activities designed to help the user practice some of the skills necessary to use RIE. This level would be suitable for college undergraduates, elementary and secondary school faculties, and school administrators.

LEVEL THREE DOING AN ERIC SEARCH

The purpose of this level is to enable the user to learn how to use the primary ERIC search tools and resources, the *Thesaurus of ERIC Descriptors*, *Research in Education*, and *Current Index to Journals in Education*. Also included in this level is learning how to state a problem so that the problem can be translated into ERIC language. The format for Level Three is a 20 minute filmstrip/cassette plus a set of activities designed to help the user practice stating a problem and using the three main ERIC documents. This level is suitable for university professors, graduate students, librarians, researchers, employees of governmental agencies, and information service center personnel.

LEVEL FOUR TRANSLATING KNOWLEDGE INTO ACTION

The purpose of this level is to assist the practitioner with the use of information in the solution of educational problems.

Level Four puts the ERIC resource into context, recognizing that information alone will not solve problems. The format for Level Four is a cassette recording which gives background information on concepts involved in knowledge utilization and also describes a set of workshop activities which will assist the problem solver in developing goal statements, seeking relevant information, and developing an action plan for problem solving.

Not all levels of materials are appropriate for all client groups. A training session coordinator on the utilization of ERIC will need to plan carefully which of the levels to use to meet the needs of specific clients. For example, if the client group merely needs to know what ERIC is in a very general way, the coordinator may only wish to show the filmstrip/cassette for Level One and distribute appropriate printed information. However, if the client group would need to become fairly sophisticated in the use of ERIC, the coordinator might wish to use Level One followed by Level Three. If the client group not only needs to become sophisticated in the use of ERIC, but also needs to develop the skills of knowledge utilization, the coordinator may wish to use Levels One, Three and Four.

UNIQUE FEATURES OF THE PACKAGE

There are three features of the *Package* which might be called unique. The first is that the developers have attempted to show in the filmstrip/cassettes an appropriate mixture of real life pictures, cartoons, and graphics. All narrative is accompanied by music which sets the tone for the information being presented.

A second feature of the program is its activity orientation. In both Levels Two and Three, there are stop sessions indicated on the filmstrips which ask the participant to practice various skills needed for an ERIC search. For example, in Level Two, the filmstrip/cassette stops midway through the presentation and the participant is asked to do a short search through *Research in Education* around a previously defined problem. In Level Three, there are a number of stop sessions which enable the participant to practice stating a problem; practice using the *Thesaurus of ERIC Descriptors* to translate that problem into ERIC language; practice looking for appropriate résumés in *Research*

in Education; and practice looking for appropriate journal article references in *Current Index to Journals in Education*.

A third feature is Level Four, *Translating Knowledge Into Action*. Here the user has an opportunity to select a real life problem of his or her own choosing, to clarify that problem and, to develop a specific goal statement. Following the development of the goal statement, the user has an opportunity to brainstorm the kinds of information resources that might be helpful in making progress toward the goal. The brainstorming session would include information sources other than those contained in ERIC. Level Four then proceeds to help the user develop a search plan which would include the searching of the ERIC system. It helps the user actually to carry out the search. Then, given information, this level assists the user in linking information or knowledge to action.

A fourth feature which cuts across the first three levels is the use of a cartoon character—an owl. During the development of the *Skill Utilization Package*, the staff of ERIC/ChESS thought that an owl would be most appropriate to represent the ERIC system. However, the owl/cartoon was not conceived as a stereotype owl representing knowledge, but a friendly, active owl, that is curious, helpful, and instructive. Throughout the first three levels, the owl seeks to convey to the viewer information, points out details that are necessary to learn about the ERIC system, and adds a bit of levity to the presentation. For example, in Level One, the owl points to the problem of information overload and helps the user learn about the general features of the ERIC system. In Level Two, the owl is used to help the user participate in a short search. In Level Three, the owl asks the user to pinpoint a particular problem.

SUMMARY

The general purposes of the forthcoming *ERIC Skill Utilization Package* are to acquaint the user with the potential relevance of ERIC to his problem solving needs; to develop some of the basic skills needed in using ERIC; and to suggest some guidelines for utilizing ERIC information. The *Package* is designed to meet a variety of training situations and a variety of client needs. For those who wish more information about the *ERIC Skill Utilization Package*, write to Dr. James E. Davis, Product Coordinator, ERIC/ChESS, 855 Broadway, Boulder, Colorado 80302.

BASIC ERIC TOOLS FOR THE LIBRARY

By Dr. Lorraine Mathies,

Head, Education and Psychology Library, University of California, Los Angeles

As the depository of educational research and experience continues to expand in the ERIC data bases, these resources are becoming increasingly important assets in the nation's pool of information. Librarians and other information specialists must be familiar with the specialized reference tools which provide access to this important commodity. This article, therefore, is designed as a quick and concise presentation about the principal reference works which are essential for the effective retrieval of information from the ERIC data bases.

From the librarian's point of view, *Research in Education (RIE)*, the primary component in the ERIC information program, may be regarded as a compact, self-contained information source which can be appended to the traditional

library collection with relative ease. The *RIE* data base is made up of report literature, i.e., interpretative summaries, research reviews, etc., on critical topics in the field of education. Most of these resources, which are cited as ERIC documents, have been reproduced on microfiche and are available as either complete or as partial collections. Access to these resources is provided by the computer-produced index entitled *Research in Education*, a monthly indexing and abstracting journal with cumulative indexes. Thus, the *RIE* file is made up of a collection of documents which is accompanied by an indexing program based upon a thesaurus of unique subject and/or search terms. In short, the *RIE* package is a self-contained component offering information in a compact format with an

indexing system originating from the language of the discipline.

The production of various reference tools has been inherent in the development of the ERIC information retrieval system. In addition to two major indexing and abstracting journals and a unique thesaurus of terminology, several cumulations of retrospective indexes, and statistical summaries of descriptor and identifier usage have been produced. The notes which follow are an attempt to point out the principal characteristics of the major ERIC reference products.

(1) *Research in Education*—a monthly indexing and abstracting journal which announces research reports, bibliographies, and other documents input to the ERIC system through a network of specialized subject centers known as clearing-houses; semi- and annual indexes are available. *RIE* is made up of document résumés as well as subject (descriptor), author (investigator), and institution (responsible agency) indexes. The résumés, which include abstracts highlighting the significance of each document, are listed sequentially by ED number (*ERIC Document*). The individual ED number serves as the unique address or locating device for documents in both the printed indexes and in the microfiche collection. It also designates the address of the citation in the computerized file.

(2) *Current Index to Journals in Education (CIJE)*—a monthly indexing journal to more than 700 education and education-related journals; semiannual and annual indexes are available. *CIJE* is organized into four principal sections: subject, author, journal contents indexes, and a Main Entry section. The citations in the Main Entry section are arranged into broad subject categories or descriptor groups, so that the user may focus his attention on his area of interest. Brief annotations outline the scope and substance of many articles. After selecting a reference in *CIJE*, the user must proceed to the appropriate issue of the journal in which the article is contained. Compatibility with the ERIC computerized retrieval system has been achieved by assigning an *EJ* (*ERIC Journal*) number to each main entry in the file. This number serves as the unique address for citations in the computerized file.

(3) *Thesaurus of ERIC Descriptors*—the definitive vocabulary of education, consisting of more than 8,000 subject headings (descriptors) used for indexing the various reports, projects, and journal articles in the ERIC collections and for formulating search requests for the retrieval of information from the system. The *Thesaurus*, which is based upon descriptors derived from the literature of the field, is continuously updated as new and significant terminology is identified and verified for use in the ERIC program.

Two types of terms are listed in the *Thesaurus*: descriptors and synonyms or near-synonyms. Descriptors are technically meaningful, authoritative concepts found in the literature; synonyms or near-synonyms (words or phrases having the same, or nearly the same meaning as another) provide as many entry points in the *Thesaurus* as possible. Both types of terms are arranged in alphabetical order in the main body of the *Thesaurus*. Synonyms or near-synonyms are displayed with the appropriate descriptor and with notations indicating their relationships:

Example: Bibliographic Control
USE CATALOGING
or
CATALOGING
UF Bibliographic Control
NT Indexing

BT Library Technical Processes
RT Book Catalogs
Classification
Information Processing

Five notations are used to structure and display each type of term in the *Thesaurus*: (1) USE; (2) UF (Used For); (3) NT (Narrower Term); (4) BT (Broader Term); (5) RT (Related Term). These notations accommodate the problems of synonymy and cross-referencing in term relationships.

Much of the language of educators is made up of multiword terms, such as "Junior College Libraries," "Library Networks," and "Decentralized Library Systems." In using the *Thesaurus*, one has no common reference point for such terms, since they are separated by the traditional letter-by-letter, alphabetic arrangement of the *Thesaurus*. This problem is solved in the "Rotated Descriptor Display," which is actually a KWIC index (Key Word in Context) considering each word in single order and multiword descriptors as a unit. This display, by sorting from left to right, serves as an alphabetical index to all significant words that form descriptors.

Example:	Libraries
Branch	Libraries
County	Libraries
Government	Libraries
Junior College	Libraries
Law	Libraries
Special	Libraries
	Library Acquisitions
	Library Equipment
	Library Guides
	Library Materials
	Library Networks
	Library Schools
	Library Surveys
Centralized	Library Systems
	Library Technical Processes

(4) *ERIC Educational Documents Abstracts*—this series, which is a cumulation of the reports appearing in *RIE* from January 1968 through December 1971, is available by calendar year bound into separate volumes. Assuming that these annual cumulations will be continued, this series, in combination with the *ERIC Educational Documents Index* and the *ERIC Institutions Index* (discussions to follow) would be of particular value to the library which was not an initial subscriber to *RIE* and now is in need of access to the reports and document résumés contained in the retrospective file.

(5) *The ERIC Educational Documents Index*—a subject-author index which provides title and document number access to the report literature in the system. This is a series of cumulative indexes which cover the scope and time frame of the document literature included in the ERIC information system. The first cumulation, 1966-1969, covers not only the document and report literature that was announced in the monthly issues of *Research in Education* from November 1966 through December 1969, but also documents cited in the *Office of Education Reports, 1956-65* (primarily Cooperative Research Reports) and the *ERIC Catalog of Selected Documents on the Disadvantaged*. Subsequent issues (1970-1972, etc.) represent a complete subject and author index to documents cited in *Research in Education*.

The subject index to each cumulation is divided into two distinct parts designated as major or minor descriptors. Major descriptors are those subject terms which identify the principal

subject concepts of a document. No more than five major descriptors are assigned to each document. Major descriptors, identified by an asterisk assigned to each term and printed in the subject indexes in *Research in Education* are the only searchable subjects in the printed versions of *RIE*. Additional subject headings or minor descriptors usually describe a document to a level of specificity beyond that discernable from major descriptors. All of these terms are searchable by using the computer. The ED number refers the user to résumés published in *Research in Education* and in *Educational Documents Abstracts*.

(6) The *ERIC Educational Documents Index-Institutions*—an alphabetical listing of all corporate authors of document and report literature announced in the monthly issues of *Research in Education* from November 1966 through December 1971, those cited in *Office of Education Reports, 1956-1965*, *Résumés*, and the *ERIC Catalog of Selected Documents on the Disadvantaged*. An institution as defined in the ERIC system is the corporate author or organizational source. Governments and their agencies, societies, universities, firms, conferences which are clearly indicated as incorporated, and private foundations are regarded as the sources of the documents for which they are responsible. The ED numbers refer the user to résumés published in *Research in Education* and *Educational Documents Abstracts* as well as the microfiche collection. A useful companion to (4) and (5).

(7) *ERIC Descriptor and Identifier Usage Report*—a unique reference tool displaying usage levels of descriptors and identifiers which is essential for either manual or computerized searching of the ERIC data bases. The report is presented in two sections with statistical data on each.

The *ERIC Descriptor Usage Report* is an alphabetical array of all ERIC descriptors together with the accession numbers to which they have been posted. In other words, this is a listing alphabetically by descriptor of the accession numbers (ED numbers) that have been indexed by terms from the *Thesaurus of ERIC Descriptors*. This listing is limited to descriptors used in *Research in Education* and certain special collections as the *Office of Education Reports, 1956-1965*. It does not include usage represented in the CIJE file. The statistical data is a tabulation of the frequency with which the subject terms were used, whether as major or minor descriptors.

A similar analysis of the EJ accession numbers is presented in a companion report titled *ERIC Descriptors (CIJE) edition*.

The *ERIC Identifier Usage Report* lists ERIC identifiers alphabetically together with the accession numbers to which they have been assigned. Identifiers are, in almost all cases, the names of specific entities as Sesame Street (coined terminology), ERIC (acronym), or New York City (geographic location). Identifiers provide additional indexing depth of a specialized nature, supplementing that provided by descriptors. They are not included in the *Thesaurus of ERIC Descriptors*. The statistical data shows the number of times each identifier has been used within the various accession series, particularly the ED series and some special collections as the *ERIC Catalog of Selected Documents on the Disadvantaged*.

The comments and notes presented above are written primarily for librarians by a librarian who is convinced of the value of the ERIC program in the world of information. In spite of some shortcomings, ERIC has given the field of education a substantial and effective dissemination process.

A NEW CLEARINGHOUSE

by David Teideman, Director
ERIC Clearinghouse in Career
Education

In October 1973 the ERIC Clearinghouse in Career Education was established at Northern Illinois University. In proposing that the National Institute of Education establish there, Associate Directors Betty J. Bosdell and Jo Ann Harris started from the definition of Career Education in NIE's Request for Proposal, namely "Career Education is the development of knowledge and of special and general competencies in individuals and groups to help them interact with the economic sector in a manner that will ensure satisfactory economic and psychological incomes from employment." With this definition of career education which emphasizes interaction with the economic sector for economic income from employment, the Career Education Clearinghouse

will continue the emphasis in vocational-technical education which the Clearinghouse on Vocational-Technical Education so ably initiated at The Ohio State University. However, with the NIE definition of career education emphasizing psychological income from employment in the interaction with the economic sector for which our new Clearinghouse is responsible, we will also continue the interest in the humanistic goals of adult and continuing education which our predecessor, the Clearinghouse on Adult Education, has also initiated at Syracuse University. Those of us who direct the Clearinghouse in Career Education must remain steadfastly interested in the entire human career, not just parochially interested in the vocational career. The vocational career breeds and sustains

the human career. For this reason we welcome the interest in work and occupations which we inherit from the Clearinghouse on Vocational-Technical Education. But on the other hand, the human career breeds and sustains the vocational career as well. The perspective of research and scholarship must be put upon the vocational career from the vantage point of the human career, not the reverse. Both, however, exist in interaction and must be seen in that interaction. For these reasons, we welcome the interest in avocational, leisure, and personal life purposes for education which we inherit from the Clearinghouse on Adult Education. We will also, more specifically, welcome suggestions for service and improvement from people in adult education, in vocational-technical education, and in career education.

We have so far implemented these initial propositions about career education by formulating the following tentative statement of scope and subject coverage:

ERIC/CICE is primarily concerned with documents related to career education, especially the following core areas:

1. In the adult education area, ERIC/CICE is responsible for research and other documents on formal and informal adult and continuing education related to all life roles—occupational, family, leisure, citizen, and organizational—through the retirement period.
2. In the vocational-technical area, ERIC/CICE is responsible for research documents and related resources in vocational and technical education, new sub-professional fields, and industrial arts education.
3. In the career education area, ERIC/CICE is responsible for research, promising practices, curricular material, and other documents related to all facets of career education at all levels of the formal and informal educational systems. Career education encompasses attitudes, self-knowledge, decision making skills, general and occupational knowledge, and specific vocational and occupational skills which help an individual achieve a balanced personal and economic fulfillment as personally reassessed and redefined at various and numerous times in his work and life.

ERIC/CICE enriches and integrates adult and vocational-technical education by inputting relevant literature in philosophy, learning psychology, manpower economics, occupational and career psychology, occupational sociology, and systems theory as well. In its informational analyses, ERIC/CICE additionally contributes to the enlargement and strengthening of adult and vocational-technical education by expanding their integration through its conception of career education and development.

To remain true to our two major constituencies while helping education to improve by facilitating the integration now possible because of their union through the conception of career education constitutes the main challenge of the Clearinghouse in Career Education. Former Assistant Secretary of Health, Education, and Welfare, Dr. Sidney P. Marland, Jr. issued this challenge to the members of the American Personnel and Guidance Association at their convention in San Diego, California, February 9, 1973. In his speech, "Career

Education and Equality of Opportunity," Dr. Marland challenged counselors this way:

As counselors, you are really at the heart of what might be the most significant reform movement in education since universal education became our watchword. I ask that you think hard about assuming that central role of orchestrating the many parts of education that must flow together if career education is to become a reality.

Marland went on to indicate that both vocational-technical educators and other teachers clearly have a stake in the improvement of education through career education, as do industry and the labor communities as well. However, Marland suggested that none of these groups have yet seized by the horns the new opportunity for educational improvement which is career education and that counselors therefore ought to stand forth in that breach at this moment.

It is moot as to whether counselors are truly at the heart of career education or not. For former Secretary Marland, career education eventually both graduates people "who know what they want to do, and have thus taken firm hold[s] of [their destinies]", and "...must apply uniformly to all..." Counselors, teachers, and workers can help students get to know what they want to do and can see that this fine condition is enjoyed by all. However, neither counselor nor teacher nor worker can obtain that knowing for a person; only the person can know for himself.

It is the fact that only an informing person (one who forms *in* himself) can know for himself what he wants to do which stands as the grand challenge before career education. An education that accomplishes this goal for each and every citizen at any time in his life when he wants to make a change will surely be an improved education; the career education for which former Secretary Marland has the following hopes:

Career education is in the best sense a preparation for a full human existence, a goal that demands as a prior condition the complete and permanent removal of all unnatural and unfair impediments. If we in education willingly accept the rising expectations that this goal implies, then I would confidently say that the search for justice and equality that we have espoused for so long as educators in America may finally have found its real beginning.

The ERIC Clearinghouse in Career Education currently stands as but partial completion of former Secretary Marland's resolve to "...end the traditional separation between academic and vocational studies, a separation which [he believes] causes an unproductive and even dangerous denial of equality within the house of education." The ERIC Clearinghouse can now help eliminate this separation between vocational-technical educators and adult educators. However, it remains for many others, including CICE's sister Clearinghouses, to help Dr. Marland reach the goal which he left us in his resignation from his Secretaryship, namely, to reach the stage where career education will "...be carried beyond the theoretical and into the classrooms through widespread installation of new curriculums that are now emerging from federally sponsored research efforts and from the much larger experimentation and trials that are being carried forward at the local level under state leadership."

The Clearinghouse is ready to serve its users and welcomes documents for the ERIC system as well as suggestions about information analysis which either field needs for its own development and/or integration with career education.

NEWS FROM THE CLEARINGHOUSES



INFORMATION RESOURCES
(Formerly, Media and Technology)

The ERIC Clearinghouse at Stanford has expanded its scope to include not only educational media and technology but library and information sciences as well.

The Clearinghouse on Library and Information Sciences has been disbanded and its functions transferred to ERIC at Stanford. The added scope involves the development of services and products to meet the information needs of the library, information science and educational communities. Specifically, this area includes the operation of libraries and information centers, the technology used to improve their operations, and the education and training of librarians and information specialists.

THE HUMANIZATION OF EDUCATION

One of the emerging trends in the field of educational media and technology is that of "humanization." The emphasis in the field has shifted away from hardware and toward the learner and his environment.

At the ERIC Clearinghouse on Information Resources we are seeing more and more papers which re-assert the importance of integrating the media of instruction with the learning characteristics of the student. And we are receiving more requests for documents telling how to fit the hardware to the person and less requests for documents telling how to impose a given technology on a school system.

The emergence of this concern for the humanization of education can also be seen in the conference themes chosen by two major professional organizations: the Association for Educational Data Systems (AEDS) and the Association for Educational Communications and Technology (AECT). AEDS chose the theme "Humanizing Education—Our Goal," and AECT chose "Instructional Technology: A People Process."

An examination of the current input from the Clearinghouse shows that much of the new emphasis on humanization of technology relies on the interactive capabilities of computers and of cable television. Although these two devices have been used for some time, their capacity to involve the student in the instructional process has only recently been explored.

Cable television brings with it not only the prospect of greater variety of entertainment, sports, and news features, but also a capacity for a two-way flow of information. A recent report by Charles A. Zraket, *Some Technical, Economic, and Applications Considerations of Interactive Television* (EM 011 397) points out that cable television is able to respond instantly, privately, and economically to the user's needs; offers search and calculation capabilities otherwise not available; and provides unlimited points of entry and delivery of information.

These features of cable television explain the number of recent studies and symposia which have examined the social, economic, and institutional impact that cable television will have on the future of education and society. The report of the *Symposia on Urban Cable Television* (EM 011 320) and *A Study of The Technical and Economic Considerations Attendant on the Home Delivery of Instruction and Other Socially Related Services Via Interactive Cable TV* (EM 011 396) both cite the potential of cable television for providing an interactive link between the home and school and between the home and the community.

Along with cable television, computers are being used to increase the interaction between the learner and his education—an important feature in the humanization of education. *Self-Optimizing Computer Assisted Tutoring: Theory and Practice* (EM 011 347) describes a National Science Foundation sponsored program in which a computer assisted instruction tutor can transmit problem solving heuristics, choose examples, handle examples from a range of students and also can "learn" superior student heuristics. A paper by Michael A. Lorber, *Increased Learning Freedom Via Computer* describes a random access information retrieval system called PYRAMID which can tailor both audio and visual instructional material to an individual learner and also provide students with daily and weekly progress reports.

The reports cited here and many others which are screened by the Clearinghouse show the responsiveness of technology to the individuality of the learner, his need for information based on his interests and his skills, and his increasing awareness of the fact that learning need not be limited to any one time or to any one place. The new technologies of cable television and computer-assisted instruction undoubtedly are only the beginning of many new media for the humanization of education.



COUNSELING AND PERSONNEL SERVICES

CAPS FOCUSES ON CAREER DEVELOPMENT

There is an increasing demand for teachers and counselors to implement ways to facilitate career development. As a result of this demand, CAPS has received numerous requests from school and community personnel for ideas, resources, and skill building techniques, causing career development to be an area of continued major focus for CAPS.

This year CAPS will again join with *Impact* and the American Personnel and Guidance Association to provide a comprehensive workshop program that will include a three-day pre-APGA Convention workshop, "Internal Compasses for Life Career Development." This workshop to be held April 6, 7 and 8 in New Orleans, will emphasize the development of "take away" skills and resources.

This "action-orientation" is designed to help participants utilize their newly acquired learnings and skills in creating exemplary career development and career guidance programs.

The workshop is termed a "hands-on" experience because it not only exposes participants to new ideas and resources, but also affords them the opportunity to "trial run" skills, utilize innovative techniques and materials and design personalized programs for special needs.

Speaker-consultants such as John Holland, Kenneth Hoyt, Joseph Johnston, George Leonard, Carl McDaniels, Betty Blackford and Stuart Packard will present new ideas and resources in career development. They will also actively work with people in using these ideas and resources to develop programs and practices for use in back-home settings.

One special feature of this workshop will be a sizeable packet of readings, references, guides and resources in career development especially developed by CAPS for workshop participants. One publication that will be included in this packet and used in the workshop is a CAPS monograph entitled, *Exemplary Programs and Practices in Guidance & Student Personnel Work*. It presents exemplary career guidance programs and practices applicable at all levels. It includes condensations of reports and program descriptions originally announced in *RIE* along with annotated entries from *CIE* and *Dissertation Abstracts*, and a listing of new books containing additional career guidance project information. A professional critique of each condensation is provided to allow the user to scan the parameters of the various projects and procedures. The resources contained in this publication will help participants locate and adapt already existing programs which have been successfully used with groups of similar age and background, and modify them to fit their own particular needs, goals and settings.



INFORMATION RETRIEVAL CENTER
ON THE DISADVANTAGED

THE COURT AND NORTHERN SEGREGATION

The ERIC Information Retrieval Center on the Disadvantaged (ERIC/IRCD) has been monitoring court decisions relating to equal educational opportunity for a number of years (see ED 062 471 for the legal briefs of the most significant cases). *Keyes v. Denver School District No. 1* is a recent case, but is yet to receive widespread public recognition although its implications are far reaching (see ED 078 112 for a record of the decision).

Even before it was decided, *Keyes v. Denver School District No. 1* was regarded as the most crucial Northern segregation case to come before the Supreme Court. Now that the *Keyes* case has been decided on grounds that suggest in *at least certain areas* the Supreme Court is not going to allow in the North what it has forbidden in the South, the irony is that it has generated little discussion. The Court's 7-1 decision—with Justice White, a former Colorado resident disqualifying himself

and Justice Rehnquist dissenting—established important and, to a certain degree, unexpected areas of agreement. The Justices made it clear that the absence of statutory provisions for a dual school system will not permit Northern cities to be treated differently from Southern cities whenever they can be shown to have a significant degree of *de jure* segregation. In terms of the past, the Justices reasserted the importance of the Court's two most far-reaching school segregation rulings of the last five years: 1) the 1968 *Green* case in which school boards with segregated districts were charged with the "affirmative duty" to eliminate racial discrimination "root and branch" by coming up with a plan that "promises realistically to work now." 2) The 1971 *Swann* case in which the Court asserted that the remedy for segregation might be "administratively awkward, inconvenient, and even bizarre in some situations," but that such remedies were permissible during the interim period of eliminating dual school systems.



CLEARINGHOUSE GOES ALL OUT FOR MERIT PAY

What makes a topic "hot"? Requests from individual Clearinghouse customers or from professional organizations point up a need for information on a particular topic. Once the need is established, the Clearinghouse on Educational Management sets out to satisfy that need in one of several ways: by searching ERIC information sources, recommending existing Clearinghouse publications, or composing new materials.

Merit pay is a current "hot topic" at the Clearinghouse. Not only have a number of users requested information on the topic, but the National Association of Secondary School Principals (NASSP) has also expressed a need for further analysis of the subject.

Early in 1973, Paul Hersey, Director of Professional Assistance at NASSP, wrote the Clearinghouse requesting cooperation on a project to analyze data on merit pay plans for secondary school administrators. NASSP had received a number of inquiries on the topic and wanted to answer three types of questions:

- (a) Where are administrative merit salary provisions being used?
- (b) How are merit schedules being constructed?
- (c) What trends can be identified in the review of merit salary approaches?

To help answer these questions, NASSP designated a data collection person in each state. These contact persons collected information on existing merit pay programs from institutions within their respective states and forwarded the material to the NASSP offices. NASSP sent the data to the Clearinghouse for analysis. The result of this cooperative venture is a brief special report on educational practice, published by the Clearinghouse, entitled *Merit Pay Programs for Secondary School Administrators*. The report is available free from the Clearinghouse while the supply lasts.

To any customer requesting information on merit pay programs, the Clearinghouse can now recommend the special report and at least one previous Clearinghouse publication: *Merit Pay*, a review of the literature on merit pay programs for teachers, valuable largely as a source of information on the background and concept of merit pay. Both of these publications have been announced in professional journals, and as a result, the Clearinghouse has been receiving numerous requests for them.

Occasionally, users request more information than even these written reports provide. In such cases, a search of the ERIC system is often advisable. The Clearinghouse can either perform a manual search for the user or refer him to one of several agencies that provide computer search services on a nationwide scale. These agencies include Lockheed's Information Retrieval Service, Research and Information Services for Education (RISE), Phi Delta Kappa's School Research Information Service (SRIS), the San Mateo County Educational Resources Center (SMERC), and the System Development Corporation (SDC). For a nominal fee, each agency can perform a machine search of *Research in Education (RIE)* and *Current Index to Journals in Education (CIJE)* for relevant materials.

Clearinghouse personnel perform manual searches of *RIE* and *CIJE* on a selected basis as time permits. An advantage of the manual search is that it allows the search specialist to evaluate the information in terms of its relevancy to the user's specific needs.

Having identified merit pay as a "hot topic" because of individual and organizational requests for information on the subject, the Clearinghouse has searched *RIE* and *CIJE* for individual customers, published a review of the literature on merit pay for teachers, and analyzed data on merit pay for administrators. The Clearinghouse can and will respond to other "hot topics" in similar fashion, since a major emphasis at ERIC/CEM is meeting the needs of its customers.



HIGHER EDUCATION

ACQUISITION AND SELECTION: THE FOUNDATION OF AN INFORMATION DISSEMINATION NETWORK

From time to time an organization must sit back and take a long hard look at itself. Too often the day-to-day activities, the major and minor crises, the big and little successes begin to distort and hide from view departures from the major organizational goals and objectives. As a consequence, major activities needed to achieve goals and objectives are also obscured. To break this cycle of events, the Higher Education Clearinghouse periodically meets to analyze its activities and

attempts to reidentify those functions which are the heart of its existence.

Not surprisingly, the most important function of a Clearinghouse is also the most obvious—the acquisition and selection of the materials within its scope. In the case of the ERIC Clearinghouse on Higher Education this material falls into two classifications: articles that appear in higher education periodicals, and fugitive documents on or about higher education (i.e. publications and manuscripts not normally collected and catalogued by academic libraries.)

The average person who turns to ERIC as a source of information does so for three basic reasons. First, the ERIC network through its two monthly journals, *Research in Education* and *Current Index to Journals in Education* acts as a bibliographic source, indexing journal articles and other forms of literature not normally handled by others. Second, the user turns to ERIC as a source for certain types of documents made available by the ERIC microfiche collection. Third, through its information analysis products, the Clearinghouse acts as a synthesizer of information; e.g., by developing bibliographies on specific issues, state-of-the-art monographs and literature review papers, the Clearinghouse brings together the material it has collected, in such a way to facilitate researchers using this information as a foundation for further work or to aid in decision-making.

To successfully perform these activities, the journal articles and other literature acquired for possible inclusion in the ERIC files must be selected with a user in mind. These two processes of acquiring and selecting what material shall appear in ERIC and what material shall be rejected is never ending.

The term "fugitive document" aptly suggests that often these documents are elusive or difficult to obtain. Only through constant searching of newsletters, brochures, bibliographies, and through personal contacts are most of these items acquired. Personal contacts are by far the most valuable source of information. By contacting those who produce or distribute this material and those who might run across this material—hopefully they will contact us as well—we greatly enhance the chances of obtaining timely and significant materials. Unfortunately, libraries and scholars often do not contact the ERIC Clearinghouses about valuable documents that should be included in the ERIC network. It is only through mutual awareness that the ERIC system can remain the vital source of information it is to educational researchers.

The problem of identifying articles in scholarly journals concerned with higher education is also of great concern. Many articles concerned with education are published by journals outside the field of education. These journals are not regularly indexed and therefore it is mainly through the efforts of those who read these journals regularly that these articles become visible to us.

The selection process is one that requires professional judgment and in-depth knowledge of specific areas. Yet caution must be exerted; for it is just as easy for the information specialist to become too sophisticated in his area and therefore to become overly selective as it is to be too unrestrictive. The former action excludes material which would be of value, the latter includes material that no one needs.

The issue of acquisition and selection is commonplace to all ERIC Clearinghouses, but because it is part of the daily routine, there is a need to constantly recall its importance and its role in the overall success of reaching the objective of information dissemination.



THE "DO EVERYTHING COLLEGE"

The ERIC Junior College Clearinghouse is concerned with identifying and analyzing the "hot" issues and trends in junior college education. One such issue involves the changes that are taking place in traditional junior college functions. From an institution designed for the clear purpose of academic and semi-professional collegiate education, the junior college is becoming the "do everything college", a multifaceted institution whose purposes are rapidly being expanded and redefined. This change is evident in the fact that junior colleges now include many more kinds of students than just the high school graduate. Through various programs, they serve all ages, from nursery school children through senior citizens (excluding, of course, elementary, junior, and high school populations).

There are at least three readily apparent reasons behind this expansion. First, educational trend setters interested in community colleges have praised the expansion that has already occurred and have urged that it be continued. Second, changing socioeconomic conditions, e.g., the rising expectations of minorities, the changing labor market, and the increasing concern with productive use of leisure time, have resulted in the development of new programs such as ethnic studies, vocational education, and community services. Third, the phenomenal increase in enrollment experienced by community colleges in the 1960s has begun to decline in the 1970s leading administrators to use marketing techniques to increase the appeal of their institutions. The basic strategy is founded on the idea that planning, policies, and operations should be oriented toward the customer, in this case, the student. The attention to customer needs encouraged by this philosophy helps administrators spot new service opportunities, and new students, more quickly.

Although much has been written about the proliferation of community college functions, changes are occurring so quickly that the need for more data is constant. One way the Clearinghouse is trying to keep up with this need is by collecting information on programs aimed at reaching groups of students who, until now, were not systematically served by two year colleges, i.e., the aged, prison inmates, very young children, drug addicts, people on active duty in the military service, the handicapped, and people living in remote rural areas. Although some of the program descriptions are found in professional and popular literature and are presently a part of the ERIC system, most of the information for this project is being gathered from program directors or with more generalized agencies concerned with a particular program category, (e.g., the American Association of Retired Teachers Association, the Drug Abuse Council, and the Day Care and Child Development Council of America).

The information will be presented through a monograph containing descriptions of illustrative programs for each of the new students mentioned above, and analyzing the implications of the "do everything" approach. It is hoped that this project will be useful not only as an end product, but will also stimulate further research and create new leads for input into the ERIC system.



LANGUAGES AND LINGUISTICS

BILINGUAL EDUCATION

The increasing importance of bilingual education programs in the United States in recent years has made its impact on the activities of the ERIC Clearinghouse on Languages and Linguistics. This is reflected in certain developments of the past year: 1) a specialist in bilingual education has been assigned to expedite the abstracting, indexing, and classifying of the increasing volume of pertinent documents, 2) the Director has helped to establish linkages between the Clearinghouse and various bilingual research and resource centers throughout the country to facilitate the flow of information, 3) bilingual professionals in the New York City area have visited the Clearinghouse to learn more about the ERIC program and its usefulness to them, and 4) the rate of requests for information concerning bilingual education has continued to expand.

This activity at the Clearinghouse reflects, of course, a recent trend in education throughout the country. Increasing federal support through such sources as Titles I, III, VII, and VIII of the Elementary and Secondary Education Act (ESEA) have supplemented local and state efforts to establish bilingual programs. Title VII of ESEA, known as the Bilingual Education Act, presently supports more than 300 programs. It should be noted that the vast majority of these projects involve Spanish-speaking students at the elementary school level. Accordingly, most of the documents processed at our Clearinghouse are concerned with this sector of the bilingual school population, although research is also directed toward the French, Italian, Greek, Chinese, American Indian, and Portuguese communities.

The collection of material already available through the ERIC system is of immense importance to educators operating in the field, who have long expressed the need for more and better sources of information to guide them in the development and maintenance of viable bilingual programs. Few public libraries, for instance, can meet the demands placed upon them for more information concerning the benefits of instruction in two languages.

A glance at the different kinds of documents available to ERIC users offers some indication of the information available. Content analysis schedules are probably unfamiliar to many people, but to a project coordinator interested in obtaining precise information about other bilingual programs, they can be extremely useful. These schedules, which are essentially project descriptions, provide data on the history, funding, and scope of programs, including sociolinguistic process variables such as the native and dominant languages and their interaction. In addition, analyses are made of materials, student grouping, tutoring, curriculum patterns, and cognitive development. The reports also discuss self-esteem, learning strategies, the bicultural and community components, and means of evaluation.

Equally helpful to those involved in bilingual education are

conference reports that summarize various meetings of bilingual educators. These forums are becoming notable, both for the number of teachers and administrators participating and for the range of topics discussed. Evaluation reports, which point out the merits as well as the defects of past projects, are also important sources of information for educators in the field. Newsletters, a valuable tool for public relations and general information, are regularly sent to the Clearinghouse and processed into the ERIC system; they frequently contain book reviews, curriculum guides, lists of publishers and distributors of bilingual texts, and interviews with leaders in the field. Textbook publishers often send their bilingual collections to the Clearinghouse for inclusion in the system and announcement in *Research in Education*. Much of the latest research in bilingual education and related fields, such as sociolinguistics and psycholinguistics, becomes available through ERIC, having been solicited and received from the investigators or institutions involved.

The Clearinghouse also compiles selective bibliographies which include categories devoted to bilingual education and the teaching of English as a second language. These lists contain the titles of pertinent entries from the latest issues of *RIE* which are available from the ERIC Document Reproduction Service (EDRS). The bibliographies appear in the October and March issues of *Foreign Language Annals* and in each issue of *TESOL Quarterly*.

In its attempt to be sensitive to the immediate needs in the field of bilingual education, the Clearinghouse on Languages and Linguistics has greatly expanded its activities. The increases in the areas of information exchange, accessions, and clearinghouse publications pertaining to bilingualism not only reflect growth in the field, but also serve as a specific example of ERIC's expanding role in all phases of education.

ERIC/CRESS

RURAL EDUCATION AND SMALL SCHOOLS

EDUCATIONAL INPUT BY THE PARENTS OF MEXICAN AMERICAN AND NATIVE AMERICAN CHILDREN

A concept basic to American education is the concept of local control. Philosophically, such local control places some policy making in the hands of the parents of the children. Through local elected school boards, the parents theoretically have a voice in the governance of their schools. However, this system has not always served a large number of parents, especially those persons of low socioeconomic status and those whose mother tongue is not English. The largest of these groups are the Mexican Americans and the American Indians.

Among both the Native American and Mexican American populations, there is a real desire to gain better control of their schools. Some are even advocating a reverse from integration. These advocates believe that reversing integration will result in greater decentralization, which will in turn result in more local community control of schools.

In a great many of the rural areas where the Native American and Mexican American populations are concentrated, the local school boards are composed of members of the

Anglo power structure. Such representation tends to insure the status quo. Because Native Americans and Mexican Americans lack the opportunity to participate in policy formulation, the changes which would enable their children to better themselves may never be made.

In the 1971 *Annual Report to the President and the Congress Title I, ESEA—The Weakest Link: The Children of the Poor* (Washington, D.C.: National Advisory Council on the Education of Disadvantaged Children, March 1971) the evaluation committee stressed that early and continued parental involvement was essential for proper accountability. Recently, there has been a trend in many federal programs demanding that there be parent input in the development of educational programs. In the Title I report, the National Advisory Council on the Education of Disadvantaged Children recommended that means for further encouragement of parent advisory committees to effect optimum accountability be developed and that appropriate provisions for and guarantees of technical assistance and access to public information be made.

Parents need to be encouraged to feel that their participation is welcome. This is especially true in the case of Mexican American and Indian parents, who in the past have so often been ignored. A constructive first step would be for the now-existing school boards to make themselves more accessible to the people. Many educators recommend that boards hold at least half of their meetings in neighborhood schools, thus enabling parents to see their board members and speak on the issues. This practice can be even more important in districts with large numbers of Mexican Americans and Native Americans, where ties to the neighborhoods are very strong and where many parents fear becoming a part of the mainstream of a larger community.

Several promising programs for the education of Mexican American children have been established. Some of them involve the hiring of Mexican Americans to act as liaison between the school and the home. Of all the programs, however, none place the Mexican American parent in a policy-making role.

There are some exciting changes being made in the education of the Native American. It is becoming more common to see all-Indian school boards in Indian communities. There are also a few Native school administrators responsible for the schools. The real need now is to have Native American representation in those areas where they are in the minority, on policy-making bodies. The Clearinghouse has also processed several documents relating to these issues for inclusion in the ERIC documents collection.

In order to acquaint the parents of Native American students with the operation of their schools, ERIC/CRESS has developed a kit of materials. There are three parts to this kit. First, there is a handbook for tribal educational leaders and others to use with parent groups. The handbook describes school operations and the basic help which parents can provide at home. In addition, describes how schools operate; the second explains to the parents how to prepare their preschool child for school. The purpose of this kit is to bridge the gap between the Native American parent and the school.

If parent and community groups are actually involved in making decisions, they will have a better understanding of the problems and some of the resource limitations affecting the operation of their schools. Furthermore, participation by members of a minority group in the governance of a school tends to aid in the development of positive attitudes in the

children from that group. Seeing the decisions being made by the adults from their ethnic group will create in the children the belief that the school also belongs to them.



TESTS, MEASUREMENTS, AND EVALUATION

PROVIDING INFORMATION

ERIC/TM has adopted a "who, what, why and where" approach to obtaining documents for the ERIC data base, providing information to users, and in preparing information analysis products. This approach has been applied to our efforts to provide information on two major areas of concern in measurement and evaluation—assessment programs and criterion referenced testing. For several years psychometricians, educators, professional associations, students, and citizens' advisory groups have expressed an interest in and a need for information on these topics.

In order to meet the demand for information on criterion referenced testing (CRT), the Clearinghouse has actively sought information on published and unpublished documents on the subject produced in this country and abroad. Whenever possible these documents have been added to the ERIC data base. Our attempts to provide a good representation of current thinking on the topic of criterion referenced testing has resulted in an increase in the number of documents acquired and processed which present information on norm referenced testing which in many cases is considered an alternative to CRT. As a result there is a great deal of current information in ERIC on the advantages and disadvantages of criterion referenced and norm referenced testing. To assist teachers, school administrators and students in understanding the concepts and issues involved in CRT, the Clearinghouse commissioned the paper *Issues and Procedures in the Development of Criterion Referenced Tests*. An annotated bibliography on tests which are criterion referenced and an extensive bibliography of the literature on CRT is being prepared by the ERIC/TM staff.

The "who, what, why and where" approach to providing information on a subject is the approach taken by ERIC/TM in obtaining, processing and disseminating information on state assessment programs. The Clearinghouse has conducted three surveys of the state assessment and testing programs offered by the fifty states, the District of Columbia, Guam, the Virgin Islands and Puerto Rico. The three surveys, *State Educational Assessment Programs 1971*, *State Educational Assessment Programs 1973 Revision* and *State Testing Programs 1973 Revision*, present an overview of operational programs, program changes and emerging programs. An attempt is made to include in the ERIC data base representative reports from each state on its assessment programs and to provide a directory of contacts for additional information in each state.



READING AND COMMUNICATION SKILLS

STUDENT'S RIGHTS

Incidents involving reading material selection practices have recently made national headlines. A group of junior high school students in Ohio filed a class action suit against their English teachers and principal for removing four pages from the student-purchased copies of *Spoon River Anthology*. According to the news service story, the teachers objected to several words contained in three of the selections. Both a network television newscast and a newsmagazine report another instance: copies of *Slaughterhouse Five* were burned in a school furnace by order of a North Dakota schoolboard reacting to a parents' complaint.

Incidents such as these occur everyday in some classroom in the nation. Not only censorship of what students read is involved but also what they write, the various cultures in the classroom, language standards and what students think. To aid in the dilemma of censorship vs rights, the staff at ERIC/RCS produced an assimilation of material that is in the ERIC system concerning students' rights and how teachers view them.

THE STUDENT'S RIGHT TO READ

Many educators hold the belief that teaching should be more than rote learning; rather it should be a process of helping students learn how to learn so that they can build a foundation for continuing education. Fundamental to this position is the right of the student to search for and read materials as he desires. Concern for this right is increasing as censors take to the bookshelves. Who is to say what materials should be removed from the shelves? In a survey by Lee A. Burrell, Jr., it was noted that there are vast differences in the quality of censors. Differences in purpose also exist, as shown by numerous definitions of the term "censorship." As pointed out by Kenneth Donelson, any work is open to attack and therefore censorship may not have a rational basis. Because "many writers are ignored or inadequately represented," censorship may be viewed as a threat to education. Students may be left with an incomplete or distorted perspective of society, as the censor may object to any aspect of modern life as represented in books. The teacher is responsible for encouraging students to read and reflect on all aspects of society, both good and bad. In an NCTE publication on the student's right to read, Kenneth Donelson cites procedures for establishing professional committees to select books, work for community support, and review complaints against books. Max L. Marshall points to several interested organizations that work to serve the public interest—among these, the National Council for Freedom to Read and the American Library Association, which has published the "Library Bill of Rights."

ED 053 110 — "How Censorship Affects the School"
by Lee A. Burrell, Jr.

- ED 068 990 - "The Right to Read" by Kenneth Donelson, Ed.
- ED 039 225 - "The Right to Read Controversy" by Max L. Marshall, Freedom of Information Center Report #199
- ED 033 923 - "The Student's Right to Read" Kenneth Donelson, Ed. Available from the National Council of Teachers of English

THE STUDENT'S RIGHT TO HIS OWN LANGUAGE

A recent statement of the Conference on College Composition and Communication (CCCC) affirms the student's right to his own language—the dialect of his home environment in which he finds his identity and style. Furthermore CCCC strongly affirms the need for teachers to have such training as will enable them to support this goal of diversity and this right of the student to his own language. The pro argument for this statement contends that a nation which is proud of its diverse heritage and cultural varieties should also preserve its heritage of dialects. How does this affect the classroom? Lloyd Leaverton stresses that "at no time during the learning situation should the child be given the impression that his basic established speech patterns are inferior speech." Rather dialect diversity can be facilitated through a language program that distinguishes between "everyday talk" and "school talk."

A paper presented at the 1972 TESOL Convention advocates an approach to composition that is bidialectal and based on the idea that control of a variety of language styles is a useful tool and that a competence of formal composition style can be achieved by teaching the student to distinguish between standard and nonstandard usage. Concerning reading, Adrienne F. Cox takes the position that at the early elementary level, children should be encouraged to use their own language to the fullest extent—that reading instruction for these youngsters should concern characters and experiences the children can identify with. It should be emphasized that these suggestions and statements do not attempt to abandon standards. However, as the CCCC statement points out, "Any claim that only one dialect is acceptable should be viewed as attempts of one social group to exert its dominance over another."

- ED 062 877 - "Reading Is Whose Speech Written Down" by Adrienne F. Cox
- ED 060 700 - "Should Nonstandard Speech Patterns Be Used in the Urban Language Arts Curriculum" by Lloyd Leaverton
- ED 062 885 - "Teaching Composition: A Report on a Bidialectal Approach" by Mary Newton Bruder and Luddy Hayden

THE STUDENT'S RIGHT TO THINK

One reflection of the concern of American educations for encouraging students to think for themselves has been the development in some schools of the student-centered curriculum. These programs encompass all levels of education and involve various degrees of student planning of the curriculum, student evaluation of their own work, and courses designed by

teachers (with various degrees of participation from students) to reflect what they think are the primary needs and interests of students. One recent study by William A. Ternent discusses three conditions to promote student involvement in the curriculum: (1) self-directed learning; (2) student acceptance of responsibility for his own learning; and (3) self-evaluation as a necessary part of learning. James L. Fenner in another study restricted to high school English teaching, found that if the student is relaxed he is likely to be motivated to learn better and that this condition is best developed in an atmosphere in which the teacher is a facilitator, rather than the only director of student learning. A book edited by Alan Purves and specifically related to English teaching specifies four objectives of an English program structured to respond to student needs: the student should trust himself, get to know himself, recognize his differences from others, and recognize his similarity to others. Experiments with a student-centered curriculum have taken place on the community college and college levels as well as in the primary and secondary schools. One study done at Appalachian State University argues that such a curriculum in the community college should attempt to involve all the resources of a community in an effort to develop the whole student. Eugene D. Tate argues that students' evaluation of their own educational progress is a useful measure of college teaching—professors frequently underestimate the students' ability to measure their own objectives and performance. The student designed curriculum is also valuable in graduate schools and professional schools, Claudine Koren argues, although many of these institutions are hesitant to adopt such unconventional programs until they have proved their worth.

- ED 067 716 - "Planning for a Student Directed, Student Evaluated Learning Situation" by William A. Ternent
- ED 067 684 - "Principles of Student-Centered High School English Teaching" by James L. Fenner
- ED 068 976 - "How Porcupines Make Love: Notes on a Response Centered Curriculum" edited by Alan C. Purves
- ED 068 098 - "Student Development: In Concept and Practice in the Community College" by the Department of Administration, Appalachian State University
- ED 067 710 - "Student Image, Student Evaluation and Education" by Eugene D. Tate
- ED 068 015 - "Student Designed Curricula: The Graduate and Professional School Reaction" by Claudine Schweber Koren

THE STUDENT'S RIGHT TO WRITE

The concept of the student's right to write is of relatively recent origin. Consequently, the nature and scope of this right are still in the process of being defined. To enhance this definitional process the NCTE Commission on Composition developed a five-page questionnaire directed to teachers of writing at all levels. The initial problem as they saw it was to find out what the rank and file English teachers, at all levels, felt about the goals of teaching writing and the methods they used to reach them. Without knowing how teachers of writing view their role the Commission felt a definition of the

student's rights would be premature. A test of the opinionnaire in 1972 on a sample consisting of 328 English teachers, at all levels yielded some interesting, though tentative, results. For example, 90% of the teachers sampled favored giving students the freedom to select their own topics for compositions, and 67% believed that "if students are given freedom in composing, they will discover various types of writing for themselves"; yet 65% claimed that "by the time they leave high school, students should be able to distinguish clearly among the four forms of discourse"—an opinion not precisely contradictory to the previously cited conclusions, perhaps, but surely tangential to them. Copies of the opinionnaire ("The Students' Right to Write") and a more complete discussion of the 1972 findings ("Are Teachers Changing Their Attitudes toward Student Writing?") are available from NCTE or ERIC/RCS. Also, several members of the Commission discuss this student right with respect to creativity, motivation, usage, and evaluation in a 90-page document entitled "The Students' Right to Write" [ED 068 938].

THE STUDENT'S RIGHT TO BE HIMSELF: CULTURES IN THE CLASSROOM

The student's right to read, to write, to know, and to his own language taken collectively could equal the student's right to learn, to be himself in the learning process and to develop a positive self-concept of himself and his relationship to others. One suggested method for accomplishing this could be learning about other cultures and relating these to the student's own. The Hawaii State Department of Education developed such a program for a secondary social studies program. This program offers a cross-cultural approach in the hope that students will develop an integrated world view as they study man and his behavior, groups of men, uses that men have of the earth, its resources, and its political institutions. A similar cultural program has been developed by the Pennsylvania State Department of Education. This unit is intended primarily as an introduction to a world cultures course for secondary grades and provides insights into social studies in general and world cultures in particular. Objectives of this program are twofold—to provide teachers with (1) a clear but scholarly definition of culture and (2) a sequence of suggested learning activities which focus on discovery and usage of anthropological generalizations employing an inductive approach. Concepts dealt with include trans-generation learning, cultural differences and similarities, cultural traits, cross-cultural perspectives, acculturation, and cultural pluralism. Students' rights are teachers' responsibilities, and the students' right to be and know himself can best be accomplished by an educational program that develops cultural awareness.

ED 073 015 — "World Cultures". *Curriculum Resource Guide* by the Hawaii State Department of Education, Honolulu, Office of Instructional Services

ED 072 983 — "The Concept of Culture: An Introductory Resource Unit in World Culture" by the Pennsylvania State Department of Education, Harrisburg, Bureau of General and Academic Education



SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

LOOKING AT/KEEPING UP

Legal education seems to be the hottest topic currently in the field of social studies/social science education. One of the highlights of the recent National Council for the Social Studies Annual Meeting held in San Francisco was a two-day pre-convention clinic on "Law Studies in the Schools: Current Programs, Ultimate Goals." The clinic was organized by the Special Committee on Youth Education for Citizenship of the American Bar Association (1155 E. 60th Street, Chicago, Illinois 60637). Several ERIC/ChESS staff members participated in portions of the clinic, armed with hot-off-the-press copies of ChESS' latest information analysis product: *Looking At Legal Education*.

ERIC/ChESS periodically publishes issues of *Looking At...*, current awareness sheets on topics of high interest to ERIC/ChESS users. The first issue was on future studies and the second on legal education. Each *Looking At...* is a four-page flyer containing information about sources and resources related to the topic of the issue. *Looking At Legal Education*, for instance, begins with an interview with Joel Henning, the Director of the American Bar Association's Special Committee on Youth Education for Citizenship. The interview gives an overview of some of the major concerns and trends in pre-college legal education in the U.S. The interview is followed by a book review of two publications on teaching about the law put out by the Golden Gate Law Review. Several ERIC documents dealing with legal education are described in another section of the issue; and there are eight short "blurbs" giving information about curriculum materials and organizations offering services in the area of legal education.

ChESS is planning to do about four issues of *Looking At...* during the first half of 1974. Currently "in the works" is *Looking At Women's Studies*; also definitely planned are issues on world order and on the energy crisis.

Looking At... is automatically mailed out to all the people and organizations on the mailing list for *Keeping Up*, ChESS's periodic general information sheet. In addition, we always print an extra supply of each issue to send to people requesting assistance with the particular topic and to hand out at workshops and conferences. Feel free to ask us for copies of *Looking At...* And, also we welcome your suggestions about topics in popular demand!



WASHINGTON REPORT

In December the National Council on Education approved five objectives designed to meet the critical problems in American education. Based on the recommendation of the NIE staff the Council labeled as priorities:

—Providing essential skills to all citizens. Efforts will be made to identify skills needed for individuals to function during and after leaving school; to assess actual skill levels of the total population and of subgroups, such as the poor and minorities; and to close gaps between actual and necessary skills. Immediate priority will be given to reading. NIE's work will be coordinated within the Right to Read Program and the National Assessment of Educational Progress sponsored by the Office of Education.

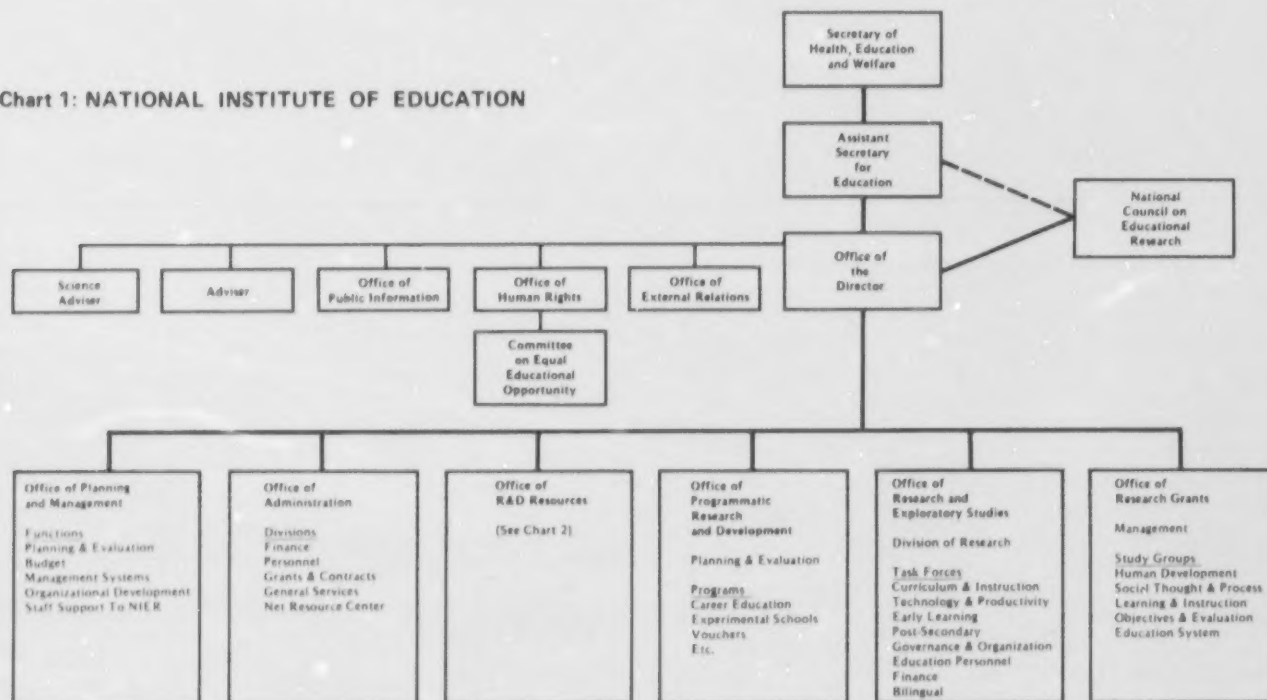
—Understanding and improving the relationship of education and work. This objective will be carried out with studies to improve our knowledge of education's role in enabling individuals to choose and advance in rewarding careers and with programs to improve career access, progression, and satisfaction. Emphasis will be given to the needs of young people and mid-career adults, especially minorities and women.

—Improving the productivity of education resources. The goal of the productivity effort will be to ensure the nation's continued ability to meet its commitment and quality education at a price it can afford. This will be accomplished through new technologies, instructional materials, uses of personnel, or forms of school organization that are less costly or more effective than existing ones or by developing more effective combinations of existing means.

—Increasing educational diversity, pluralism, and opportunity. This effort will concentrate on programs designed to meet the diverse education needs and interests of individuals and groups within our society. The experimental schools, education vouchers, and multicultural programs of the Institute will be the primary means of implementing this goal.

—Developing problem-solving capacity in State and local education systems. Activities will focus on the need to improve incentives and capacities for State and local education agencies to reform and improve the practice of education, either through the use of the results of research and development activities or through other means.

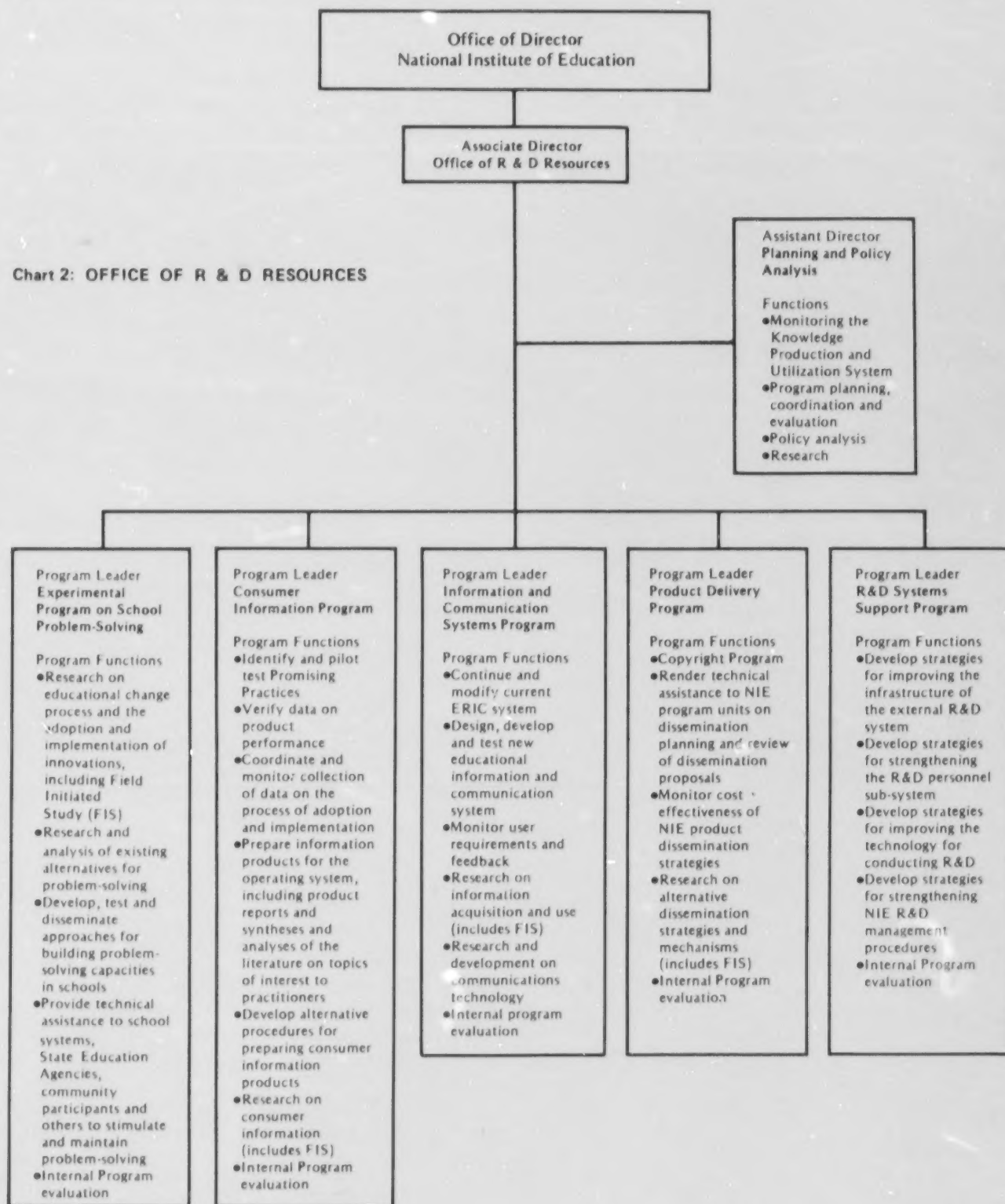
Chart 1: NATIONAL INSTITUTE OF EDUCATION



The two charts shown here relate to ERIC's parent organization, the National Institute of Education. The first represents the general organizational structure of

NIE; the second is an amplification of the functions of the Office of Research and Development Resources of which ERIC is a part.

Chart 2: OFFICE OF R & D RESOURCES



NEW PRODUCTS AND SERVICES

The following products and services are available from the clearinghouses or as noted. Clearinghouse addresses may be found on the inside back cover.

THE DISADVANTAGED

The Assessment of Minority Groups: An Annotated Bibliography, compiled by Jean Barabas.

A selected bibliography of 242 citations of journal articles, books, and research reports. Subject index.

Available free from the Clearinghouse.

EDUCATIONAL MANAGEMENT

Site Development, by Alan M. Baas. Educational Facilities Review Series, Number 19.

Discusses new considerations in site development reflecting the integration of school and community facilities and activities, the use of alternative facilities, designs for unusual sites, and landscaping and maintenance.

Single copies free on request from the Clearinghouse.

Construction Management, by Alan M. Baas. Educational Facilities Review Series, Number 20.

Explains the application of construction management to school building programs, emphasizing possible savings in time and money, the meeting of functional needs through design, and the relationships of the construction manager and the educator-client.

Single copies free on request from the Clearinghouse.

The Educator and the Architect, by Alan M. Baas. Educational Facilities Review Series, Number 21.

Describes the educator's role and responsibilities in the team approach to facility planning, consisting of one group responsible for defining school and community requirements, and another group accountable for translating the educational needs into a workable building design.

Single copies free on request from the Clearinghouse.

Joint Occupancy, by Alan M. Baas. Educational Facilities Review Series, Number 22.

Explores the concept of joint occupancy in using scarce land to the greatest public advantage, highlights the economic and educational benefits, and describes New York City's experiences in use of joint-occupancy and air-rights construction.

Single copies free on request from the Clearinghouse.

The Role of Elementary School Principal, by Terry Barraclough. Educational Management Review Series, Number 19.

Reviews the multiple aspects of the principal's role—perceptions and expectations, educational and administrative duties, and responsibilities as change agent, identifying problems and suggesting solutions.

Single copies free on request from the Clearinghouse.

Implementing Curriculum Change, by Warren Mellor. Educational Management Review Series, Number 20.

Looks at the need for implementation of new "humane" curricula to meet the common needs of all students, using carefully planned programs of change, evaluation methods, and installation processes.

Single copies free on request from the Clearinghouse.

Program Evaluation, by Terry Barraclough. Educational Management Review Series, Number 21.

Concentrates on methods of program evaluation enabling administrators to watch over their education processes, define and develop objectives, assess products and procedures, and to begin, revise, or delete programs.

Single copies free on request from the Clearinghouse.

Board-Administrator Relationships, by Nan Coppock. Educational Management Review Series, Number 22.

Focuses on the promotion of harmonious relationships between board members and administrators, the urgency of contemporary issues and solutions, and predictions for future functions and organization of school boards.

Single copies free on request from the Clearinghouse.

HANDICAPPED AND GIFTED

Special Tape Series

1. *Teacher Training in Special Education*

Conversations with educators involved in teacher training programs recorded during a Leadership Training Institute for Special Education.

Cost: \$10.00

2. *Leadership Training Institute for Special Education*

A conversation with a project director, project advocate, and funding officer about concepts for the LTI.

Cost: \$10.00

3. *Tapes on Career Education*

The Right to Education

A presentation by a lawyer, Thomas K. Gilhool, at the Career Education Conference held in New Orleans, Feb., 1973.

Cost: \$10.00

Career Education—Its Nature and Need

A presentation by educator, Kenneth B. Hoyt, at the Career Education Conference held in New Orleans, Feb., 1973.

Cost: \$10.00

All requests should be made to the CEC Publications Unit, The Council for Exceptional Children, Arlington, Virginia 22202.

HIGHER EDUCATION

Urban Internships in Higher Education, by Donald G. Zauderer.

Zauderer focuses on the objectives of internship programs and provides discussion on a variety of issues and problems associated with this form of experiential education. Since urban internships are rapidly becoming an integral part of educational programs at most colleges and universities, the concepts discussed will be of considerable value to institutions that wish to structure programs to best serve urban agencies and be of maximum educational benefit to participating students.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, DC 20036 (\$2.00—prepaid).

The Relative Benefits of College: An Overview and Implications, by Oscar T. Lenning.

Various non-intellective outputs of college are discussed in this monograph. The relative importance of various college outputs (including intellective outputs), factors accounting for different non-intellective outputs, and the significance of such outputs and relationships for the practical concerns of administrators and others in higher education are emphasized. American Association for Higher Education, One Dupont Circle, Suite 780, Washington, DC 20036 (\$2.00—prepaid).

The Small College: A Bibliographic Handbook, by Thomas A. Askew.

A functional guide to the literature on small colleges. It contains over 250 annotated journal articles, dissertations and books. It also has an extensive index.

Council for the Advancement of Small Colleges, One Dupont Circle, Suite 750, Washington, DC 20036 (\$2.50—prepaid).

Goals for Higher Education: Definitions and Directions, by David A. Trivett.

Major studies of goals are reviewed, beginning with *Higher Education for American Democracy*, documents produced by major associations, government commissions and committees, as well as relevant documents from the Carnegie Commission and selected state planning documents.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

Student Discipline Systems in Higher Education, by Stanford Cazier.

This paper reviews the literature that documents both the central events and commentary on the important developments in student discipline. The author devotes extensive discussion to the issues of substantive and procedural due process.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

Employment of Nontenured Faculty: Some Implications of Roth and Sindermann, by Carol H. Shulman.

This monograph discusses two Supreme Court decisions on faculty tenure, *Roth* and *Sindermann*, and examines the impact they had on college tenure policies. The monograph will also be published by the Denver Law Journal.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

INFORMATION RESOURCES

Instructional Media and the Handicapped, by Dr. Wayne D. Lance.

This extensive, well-written and well-researched paper reviews the state of the art relevant to the development, evaluation, and application of instructional media and materials. It begins with a discussion of the need for personalization of instruction of handicapped children, and suggests that instructional technology has much to contribute to the process of personalization. Numerous adaptations and curricular applications of media for handicapped learners are presented. Finally, a delivery system which can provide a network for supplying each handicapped learner with the necessary resources is discussed. Dr. Lance is director of the Northwest Regional Special Education Instructional Materials Center in Eugene, Oregon.

Available from Box E, School of Education, Stanford University, Stanford, California 94305 (\$3.25—prepaid). Checks must be made payable to "Box E". No P.O.'s are accepted. EDRS—(to be announced); MF \$0.65, HC \$3.29.

A Comparison of Guides to Non-Print Media, by David E. Rawnsley.

Directed toward those who must build, expand or maintain a multi-media resource center, the publication compares side-by-side in tables the various guides, indices, and catalogs which describe instructional materials. An introduction explains what to look for in a guide to non-print media, and suggests criteria. Within the tables is information on guides' availability, price, level, and type of media covered, as well as frequency of publication. The tables indicate whether the guides contain the following information: publication dates, primary audiences, running time, content summaries, reviews, producers, distributors, prices and special conditions of availability. This is a companion publication to *Instructional Materials in the Classroom: A Basic Reference Shelf*.

Available from Box E, School of Education, Stanford University, Stanford, California 94305 (\$3.00—prepaid). Checks must be made payable to "Box E". No P.O.'s are accepted. EDRS—(to be announced); MF \$0.65, HC \$3.29.

Instructional Materials in the Classroom: A Basic Reference Shelf.

A 16-page bibliography compiled by the Clearinghouse staff, this paper is designed to help teachers become aware of the variety of instructional materials available for use in their classrooms, and includes citations on publications which help them use these materials in the most effective ways. The paper contains 71 abstracts divided into four categories, indexes/resource guides/directories; catalogs; "how-to's"/textbooks; and state of the art. This is a companion publication to *A Comparison of Guides to Non-Print Media*.

Available from Box E, School of Education, Stanford University, Stanford, California 94305 (\$2.00—prepaid). Checks must be payable to "Box E". No P.O.'s are accepted. EDRS—(to be announced); MF \$0.65, HC \$3.29.

The Effective Use of Media in Innovative Schools, by Dr. Richard B. Lewis.

This publication focuses on what is being done now, and how, when it comes to effective use of media in innovative programs. The 15-page paper includes 62 citations of documents which describe active programs. Dr. Lewis has geared the paper especially for district-level administrators, curriculum supervisors and media specialists. Teachers, too, will find the publication of value. Abstracts are divided into five categories: Elementary and Secondary Education; Higher Education, including Community Colleges; Adult Education; Developing Countries; and a Supplement of Most Recent Documents.

Available from Box E, School of Education, Stanford University, Stanford, California 94305 (\$2.00—prepaid). Checks must be payable to "Box E". No P.O.'s are accepted. EDRS—(to be announced); MF \$0.65, HC \$3.29.

Instructional Television: The Best of ERIC 1973, by Dr. Warren F. Siebert.

A sequel to a sellout publication two years ago, this 24-page publication contains the best of ERIC abstracts dealing with instructional television—all dated after April 1972, when Dr. Siebert's first popular bibliography was published. The

abstracts are divided into nine categories: bibliographies/guides, overviews, cable television/telecommunications, children and television, continuing/higher education, public television, international, general research, and other.

Available from Box E, School of Education, Stanford University, Stanford, California 94305 (\$2.00—prepaid). Checks must be payable to "Box E". No P.O.'s accepted. EDRS—(to be announced); MF \$0.65, HC \$3.29.

JUNIOR COLLEGES

A Basic Bibliography of Books, Journals and References on the Community/Junior College. Revised August 1973.

Ten-page guide for colleges that wish to create or up-date a professional library.

Single copies free on request from the Clearinghouse.

Work Satisfaction Among Junior College Faculty Members, by Arthur M. Cohen.

Reports the results of studying faculty satisfaction in three junior college settings.

Single copies free on request from the Clearinghouse.

Junior College Job Satisfaction, by Joanne Frankel.

A review of research by sociologists, psychologists and educators on work environments, relating the findings to community college faculty.

Single copies free on request from the Clearinghouse.

Community College Faculty Development, a Brief prepared for the American Association of Community and Junior Colleges 1973 Assembly: "New Staff for New Students."

This review offers an overview of community and junior college teacher preparation emphasizing special and different types of staff development programs that have been operated or proposed.

Single copies free on request from the Clearinghouse.

Access to Higher Education Through the Community Colleges, by Sidney W. Brossman, Chancellor of the California Community Colleges.

This paper discusses the mission, purpose and practices of the nation's largest community college system explaining these operations in layman's terminology.

Single copies free on request from the Clearinghouse.

Careers in College and University Student Affairs, by William G. Thomas and Jane S. Permaul.

A monograph that serves as a practical guide to individuals interested in finding a job in college student affairs.

Available from California Personnel and Guidance Association, 654 East Commonwealth Avenue, Fullerton, California 92631 (\$3.68, includes tax and shipping).

LANGUAGES AND LINGUISTICS

ERIC Documents on the Teaching of Foreign Languages: List Number 11, compiled by Carolyn Monka and Meredith Davis.

A bibliography of all ERIC Documents relevant to foreign language education which appeared in *R/E* from October 1972 through March 1973.

Published originally in *Foreign Language Annals*, 7 (Oct. 1973), 138-55. Reprints available from the Clearinghouse on request. EDRS—(to be announced).

1972 ACTFL Annual Bibliography of Books and Articles on Pedagogy in Foreign Languages, edited by Dale L. Lange.

Lists 3623 documents concerned with pedagogy in modern foreign languages, Latin, Greek, English as a second language and applied linguistics that were published during 1972. Author index included.

Published originally in *Foreign Language Annals*, 6 (May 1973), 538-658. EDRS—(to be announced).

RURAL EDUCATION AND SMALL SCHOOLS

Guidance Programs and Practices in Rural and Small Schools, by Richard R. DeBlassie and Martha Ludeman.

Examples of how small and rural schools provide essential guidance services are presented through a synthesis of literature dealing with current guidance programs and practices in small and rural schools. Suggestions are made for training guidance specialists and for providing viable innovations in counseling and guidance services.

National Educational Laboratory Publishers, Inc., 813 Airport Boulevard, Austin, Texas 78702 (\$2.50—Stock Number EC-002).

An Annotated Bibliography of Dissertations on American Indian, Mexican American, Migrant, and Rural Education, 1964-72, compiled by Howard K. Conley.

An annotated bibliography covering American Indian, Mexican American, migrant, and rural education, this document presents 103 entries covering doctoral dissertations written between 1964-72. The entries are indexed by ERIC descriptors.

Contact Clearinghouse for further information.

Rural Education and Small Schools, A Selected Bibliography (with ERIC Abstracts). ERIC/CRESS Supplement No. 3.

Access to recent research findings and developments related to rural education and small schools is provided in this new bibliography. A supplement to three previous publications, this bibliography contains 230 citations with abstracts which appeared in *Research in Education* between April 1972 and March 1973. Approximately 90 entries which appeared in *Current Index to Journals in Education* from April 1972 through March 1973 are also included. A subject index by ERIC descriptors is provided.

National Educational Laboratory Publishers, Inc., 813 Airport Boulevard, Austin, Texas 78702 (Stock Number EC-001).

Mexican American Education, A Selected Bibliography (with ERIC Abstracts). ERIC/CRESS Supplement No. 3.

A supplement to three previous ERIC/CRESS publications, the present bibliography contains 221 citations and abstracts which appeared in *Research in Education* from March 1972 through March 1973. Also included are 86 citations which appeared in *Current Index to Journals in Education* from April 1972 through March 1973. A subject index by ERIC descriptors is provided.

National Educational Laboratory Publishers, Inc., 813 Airport Boulevard, Austin, Texas 78702 (\$5.00—Stock No. EC-003).

National Assessment and Rural Education, by George Henderson.

Findings of the National Assessment exercises indicate that rural students perform below the national average in reading, writing, citizenship, science, and literature. This booklet examines the performance of rural youngsters and adults in

the above areas and discusses the implications of the National Assessment findings for the country.

National Educational Laboratory Publishers, Inc., 813 Airport Boulevard, Austin, Texas 78702 (\$2.50—Stock No. EC-004).

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

Bringing About Change in Social Studies Education, by Alice R. Jwaideh and Gerald W. Marker.

The authors discuss diffusion, adoption, and change in social studies. Background literature, diffusion models, change-agent roles, techniques, and examples of change projects are covered. SSEC Publication Number 160 (\$6.00). EDRS—(to be announced)

Global Dimensions in the New Social Studies, by John H. Spurgin and Gary R. Smith.

The purpose of this survey of instructional resources is to assist teachers and curriculum planners in identifying materials that will help them to globalize the social studies curriculum in their school. The authors have analyzed, systematically and in detail, 14 packages of "new social studies" materials that contain components appropriate for international education. The format of the analyses is similar to that which teachers and curriculum planners have found so useful in Mary Jane Turner's *Materials for Civics, Government, and Problems of*

Democracy. In addition, the authors have prepared an annotated list of simulation/games with global dimensions and an annotated list of global education centers, projects, and organizations that can provide services and products for international educators.

SSEC Publication Number 165 (\$4.75). EDRS—(to be announced)

Guidelines for Using a Social Simulation/Game, by Katherine Chapman.

The guidelines were developed to provide general guidance on how to prepare for, conduct, and debrief any social simulation/game. The report discusses development and classroom tryouts of the guidelines which can be used by educators.

SSEC Publication Number 163 (price not assigned). EDRS—(to be announced)

Looking At... (An occasional topical information sheet published for insertion into the newsletter, *Keeping Up*. It includes an interview with experts in the field, book reviews, blurbs on material and organization resources related to the topic.) Two issues are available:

Looking at Future Studies

Looking at Legal Education

May be obtained by writing to the Clearinghouse.

ERIC REFERENCE TOOLS

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A monthly abstract journal of recently completed educational research reports, descriptions of exemplary programs, and other documents of interest to the educational community. Directed to school administrators, teachers and supervisors, school board members, commercial and industrial organizations, educational researchers, and the public, this journal contains:

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THESAURUS OF ERIC DESCRIPTORS

The definitive vocabulary of education, developed and brought up to date by educators who review the literature in their field. The *Thesaurus* is the major source of subject headings used for indexing and for retrieval of documents and journals in the ERIC collection.

The *Thesaurus of ERIC Descriptors* will serve to give all educators an increased awareness of the language of their field. A useful tool for teachers, the student of education, and the information specialist. Superseding all previous editions, the 4th edition of the *Thesaurus of ERIC Descriptors* contains newly assigned descriptors as of March, 1972.

Clothbound	\$8.95
Paperbound	\$6.95

The above publications are available from Macmillan Information, 866 Third Avenue, New York, N.Y. 10022.

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De Kalb, Illinois 60115

(CG) COUNSELING AND PERSONNEL SERVICES
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North University Street
Ann Arbor, Michigan 48104

(UD) THE DISADVANTAGED
Teachers College Box 40
Columbia University
New York, New York 10027

(PS) EARLY CHILDHOOD EDUCATION
University of Illinois
805 West Pennsylvania Avenue
Urbana, Illinois 61801

(EA) EDUCATIONAL MANAGEMENT
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Library, South Wing
Eugene, Oregon 97403

(HE) HIGHER EDUCATION
George Washington University
One Dupont Circle, Suite 630
Washington, D.C. 20036

(EC) HANDICAPPED AND GIFTED
1920 Association Drive
Reston, Virginia 22091

(IR) INFORMATION RESOURCES
Stanford University
School of Education
Center for Research and Development
in Teaching
Stanford, California 94305

(JC) JUNIOR COLLEGES
University of California
96 Powell Library
Los Angeles, California 90024

(FL) LANGUAGES AND LINGUISTICS
Modern Language Association of America
62 Fifth Avenue
New York, New York 10011

(RC) RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003

(SE) SCIENCE, MATHEMATICS, AND
ENVIRONMENTAL EDUCATION
Ohio State University
1460 West Lane Avenue
Columbus, Ohio 43221

(SO) SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
855 Broadway
Boulder, Colorado 80302

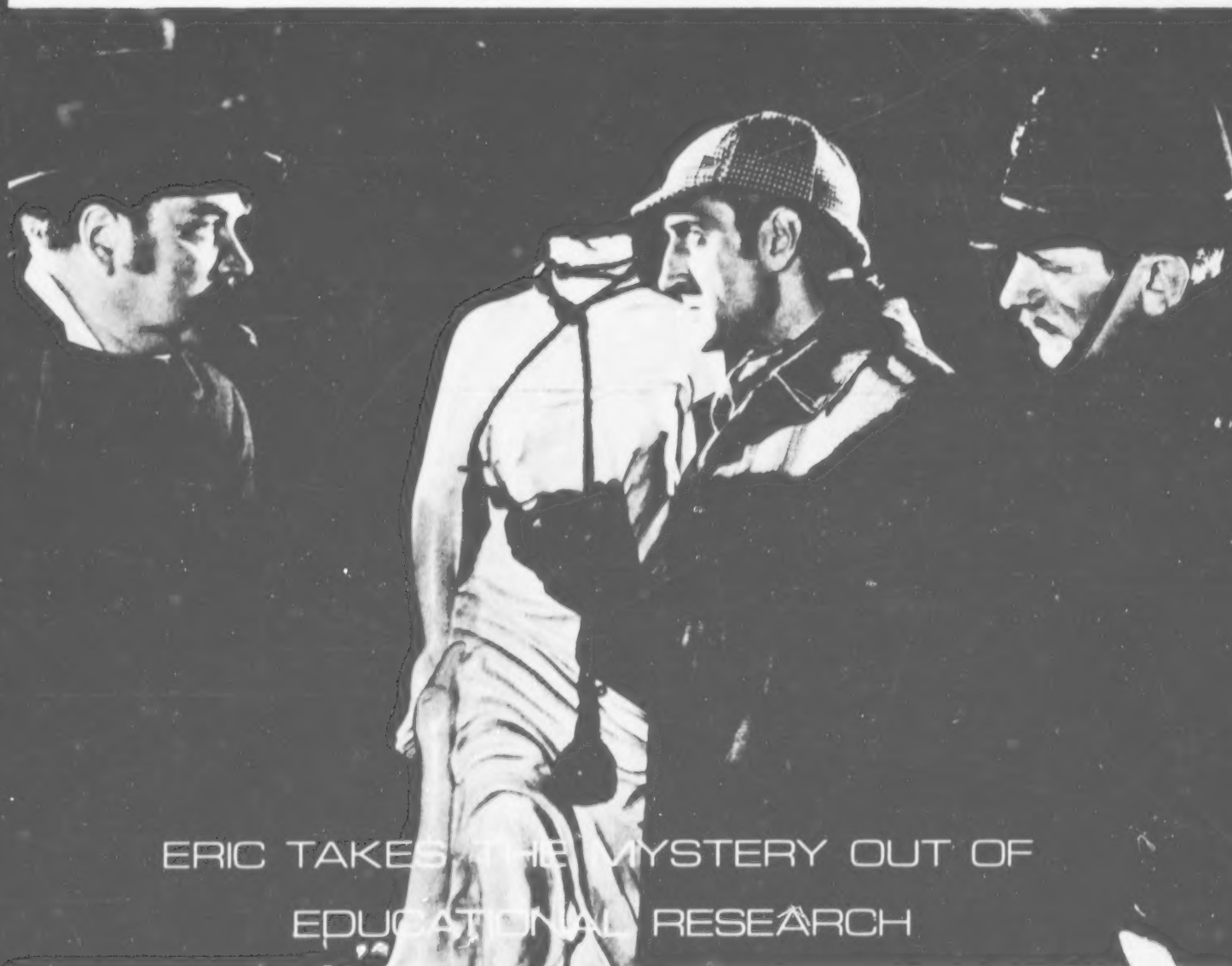
(SP) TEACHER EDUCATION
One Dupont Circle, Suite 616
Washington, D.C. 20036

(CS) READING AND COMMUNICATION SKILLS
National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois 61801

(TM) TESTS, MEASUREMENT, AND EVALUATION
Educational Testing Service
Rosedale Road
Princeton, New Jersey 08540

THE ERIC REPORT

NUMBER 4 JULY-AUGUST 1974



ERIC TAKES THE MYSTERY OUT OF
EDUCATIONAL RESEARCH

Educational Resources Information Center

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University of California, Los Angeles

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The Educational Resources Information Center is
funded by the United States Department of Health,
Education and Welfare's National Institute of Education.
The views expressed herein do not necessarily represent
NIE policy.

THE ERIC REPORT

This issue of the *ERIC Report* includes articles that deal with ways users access materials within the ERIC system that are pertinent to their particular interests. Two of the articles are concerned with computerized searching of the ERIC files; the third with the repackaging of ERIC documents for teachers and researchers interested in languages and linguistics.

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New Products and Services

ERIC Reference Tools

LIBRARIANS AND COMPUTER-BASED INFORMATION SERVICE

by Peter G. Watson, Librarian,
University of California, Center for Information Services, UCLA

These are exciting times for libraries, and a large part of the reason is, of course, the advent of the computer. Before the first giant wave of computer-induced change has finished breaking over the library, threatening at some points to carry all before it, the second is already upon us. The first wave, broadly stated, was the use of the computer to upgrade the library's internal technical operation, i.e., to enable it to meet its existing service obligations in a better fashion. It is an understatement to say that even in this area, much remains to be done. Meantime, harassed librarians are having to divert some of their attention to the second wave, which is the use of the computer to assist in performing information retrieval for patrons. This, by contrast, has the effect of allowing (some would say, compelling) the library to offer quite new kinds of service, and is therefore ultimately the more important application. There are at present no clear limits on where this second wave will take the library, but already the first major area of innovation is apparent. This is the utilization of computer-produced files of bibliographic information, prominent among them being the ERIC data base. I do not propose to discuss here the characteristics of the ERIC files themselves; instead I would like to examine, in a necessarily succinct form, two of the fundamental questions which this whole class of new information products poses for the library. These are: "What are the characteristics of these data bases which put them in the library's realm of interest?" and "What is to be the role of the librarian in dealing with them?" Most of the examples I shall use will pertain to bibliographic files, but I have also included some references to a second and immensely more complex area, namely the numerical data bases.

THE CHARACTERISTICS OF DATA BASES

We refer here not to the technical specifications but to the attributes which make it imperative that *any* college or university, and in particular, its library, must examine not so much whether, as how, to gain access to computerized data bases. First, *content*: the information appearing in many machine-readable data files is of crucial importance to teaching

and research. In some cases such information is available in no other way, as witness the 1970 U. S. Census. The tapes contain anything from 10-30 times as much information (depending on who is asked) as will ever appear in the printed tabulations. The creation and use of digital data is sweeping rapidly through the groves of academe—biomedical data; weather data from satellites; bibliographic data; economic and demographic data; even full-text material, such as legal statutes or literary texts. These are just some examples of the widespread use already being made of computerized files of data. By the turn of the century, most likely no facet of teaching, research and scholarship will be unaffected by them. Second, *timeliness*: where the printed version is a by-product of the original data base, as is the case with serially produced bibliographic materials such as the ERIC files. For example, the machine-readable version arrives significantly sooner (say, 4-8 weeks) than the corresponding printed issue. Since the users of such material are invariably busy people, and since there has already occurred the customary time lag of several months between the appearance of a paper and the dissemination of an abstract of it, timeliness is a powerful factor in persuading patrons that a computer search can help them. Third, *processability*: once information exists in a machine-readable format, it can be manipulated electronically. It can be searched by computer programs; it can be copied from one type of storage medium to another; it can be reorganized (reformatted) or altered (augmented, updated); and it can be transmitted at electronic speed. All this means that every aspect of the information transfer process is lifted into a new dimension where "information" becomes a pure and distinct entity, essentially unconfined to one medium or one place. Fourth, *size*: if these were small files with negligible growth rates, the problem would be correspondingly smaller. But they are, in the main, the central, large, fast-growing collections of much-needed and much-used data—which is why it was found necessary to put them in computerized form in the first place. *Chemical Abstracts* alone is now putting out a million new citations every three years. At present some people think, and reasonably enough, that for searching *Research in Education* the computer provides little, if any, gain in total efficiency

over the cumulative indexes. But *RIE* is still less than 100,000 citations; on which side will the balance fall as the file approaches 500,000 or 1 million records? Fifth, *cost*: one must expect the cost of a data base to be in the thousands of dollars (that is, if one is paying for the information, not merely for the cost of copying). A good average for a serial bibliographic file is \$5000 per year. The relatively high cost of acquiring the data is sometimes adduced as a reason why libraries cannot, and should not, get into this area. But one reason the library buys the more expensive printed forms of information is that individuals cannot afford to. On a university campus, for example, it is clearly better that a central agency like the library take responsibility for the purchase of some widely needed data base than that half a dozen departments buy it, each unaware that the others have done so. Furthermore, it is increasingly going to be the case that two of the largest cost centers, namely development of the system and acquisition of the data, will be separated from the question of whether or not a library can obtain service for its users. With terminal access to a variety of massive on-line files, the user (whether the library or the patron) pays only for the search that is actually performed at the terminal. Sixth, *miniaturization*: in these early stages of its evolution, computerized information storage and retrieval is mainly discussed in terms of the necessity for new search procedures, service patterns, and new administrative responses. It is important also to see it as a major advance in the post-war drive toward controlling information by miniaturizing it. The "information explosion" that we all know and love so well is mainly, to this point, an increase in information generated by personal, manual methods. It is an increase which parallels the increase in the world's population available for this activity. But we are now entering an era when the automatic gathering of information (by tape recorders, sensors, and other telemetry devices linked directly to computers) will become commonplace; the "information explosion" resulting from *this* development will be almost unimaginable by present standards, and our only hope of salvation will be to have some solutions ready and in place before it strikes.

THE ROLE OF THE LIBRARIAN

By now it must be plain to readers of *The ERIC Report* that data bases are an established fact on the one hand, and that on the other, there is a large and growing mass of people with information needs of the kind that could be helped by access to those data bases. This immediately suggests the need for competent intermediaries. (There are those who claim that an intermediary is not necessary, is in fact a hindrance, when an on-line terminal is available to the user for direct, interactive searching. I disagree with that assumption on several grounds, too lengthy to go into here. Suffice it to say that arguments against having an information specialist interposed between the data base and the end-user commonly involve the *non sequitur* that some users can perform their own searches, therefore all users should.) There are many advantages to having this intermediary function performed by a librarian. The librarian is able to do much more than simply the core activity of writing the search. The librarian can deploy, if you will, data bases as one among a whole series of information resources, and can guide the user through the complete sequence of steps necessary to fulfill the information need, much as in existing library reference service. Furthermore, the librarian is relatively permanent, unlike, for

example, a graduate student; and easily available, unlike the representative of a searching system located hundreds or even thousands of miles away, who may come to town to sell you on a search, and then move on. The librarian is also trained to be impartial about answering information needs and as objective as possible about sources, and will thus be acting in the user's interests. If we outline the aforementioned sequence of steps, which are standard enough that we may call them a formal technique, we will see the similarities and the differences as between computer-based reference service, as it is coming to be called, and the existing practice of reference librarianship.

We may assume that the patron comes in not knowing much about the possible information sources that might answer his need: he doesn't wish to be his own librarian or information specialist, he wishes to be a biochemist, or an engineer, or a historian, or whatever. Of course the first thing the librarian decides is whether or not a computer search is indicated, and if not, which other information pathway should be followed. If, however, the answer is yes, then the librarian has to explore two other areas, in an order which is variable. These are the type of search and the data base or bases to be searched. A third factor may come into the picture, namely the cost of the search. The librarian may only have access to one computerized search service, such as an in-house operation within the company; or the data base required may be actually available from only one agency. In this type of situation the latitude for obtaining a computer search is obviously somewhat narrow. However, if the desired data base is accessible from several sources, or the request might be adequately met by several different data bases, then the options begin to increase, and the librarian's scope and competence to act as an expert advisor become important. (Some have characterized this as a "brokerage" function, which is correct as long as one remembers that the librarian's impartiality is not being distorted by the prospect of commissions or percentages.) Assuming that the librarian has such a choice to offer the patron, the next decision to be made might be whether an on-line search or a batch search would be preferable. In an increasing number of situations, the solution might well be to have both — an immediate, on-line search of the ERIC back-files, for example, to bring the patron up to date, followed by regular notification of pertinent items in *RIE* and *CIE*, based upon a standing 'profile' of the patron's area of interest. The latter is sometimes also known as an SDI system ("Selective Dissemination of Information"), and although its use is now quite widespread, it entails, I find, more explanation to the non-librarian than does a one-time, on-line retrospective. The reason for this is that the patron who comes to the desk is asking, more often than not, a one-time question, and can quickly perceive an on-line computer search as an extension of the librarian's directing him to a specific printed source. Most of the people who use the printed *RIE* regularly each month do not have to come near the reference desk to do so, which indicates the need for active publicity measures by the library to the large number of regulars who use the library unobtrusively. Few people are accustomed to the idea of the library providing regular current bibliographies to their personal specifications, and the new-found ability to do so is an improvement which delights the librarian no less than the patron.

Librarian and patron having settled which data base or bases are to be searched, and by what method (bearing in mind relative costs), the librarian should then be prepared to go ahead and formulate the search. This has been dealt with at

some length elsewhere¹ specifically in relation to the ERIC data bases, and my purpose here is merely to present the basic sequence of steps. The first necessity is for a written statement by the user of the area of interest. A multi-part form is recommended for this purpose; I believe it to be as true of on-line searching as of batch searching that having a kind of checklist of points to cover helps the user to be full and complete in his request, helps the librarian to perform a better analysis, and thus helps to keep costs down at the stage of actual processing. So the next step is for the librarian to analyze the statement of interest in terms first of its major elements, or concepts, then of the various terms that might express those concepts. For example, one such concept might be "non-public schools," in which case the librarian, skilled in the use of the *Thesaurus of ERIC Descriptors*, might dig out such terms as Catholic Schools, Catholic Elementary Schools, Parochial Schools, Private Schools, and Proprietary Schools. But the analysis must also be a logical analysis, identifying the ways in which the desired list of search elements (subject terms, free language phrases, authors' names, publication dates, etc.) should be linked together. This done, the search statement is then written up in the given syntax and notation of the particular search service being utilized, and submitted for processing.

After that, it is essentially a question of waiting for the results. Here the poor user is often on his own, ("I ordered a search and it came back two weeks later and it wasn't at all what I wanted and it cost me \$175," is a not unfamiliar

lament), but if he has the assistance of a good librarian, there can be some monitoring and evaluation of the results. There are some fairly well-accepted techniques for measuring the search performance and for getting the patron's assessment of the actual usefulness, or otherwise, of the results. Based on these, it may be appropriate for the librarian to refine the search statement and resubmit it. If the search is a regular, current awareness search (SDI), the aim is for the 'profile' to settle down, and for the librarian to then drop out of the loop, with the weekly or monthly bibliography going directly to the end-user. However, it is wise for the librarian to keep track of all the searches for which he has been responsible (librarians are natural record-keepers, which is another advantage of utilizing their services for this activity — you can call them six months later and say, "I'd like to change my profile, but I don't have a copy of it with me" and they ought to be able to produce it).

This, then, is a brief outline of the characteristics of computer-readable data bases, and the role which I believe librarians are eminently qualified to fill in the mediating of access to them. I will be bold to say that it represents a challenge unique in the five thousand year history of the profession; on the response we make will depend much of the library's case for future acceptance, respect and support within its organization.

¹ Mathies, M. Lorraine, and Peter G. Watson. *Computer-based Reference Service*. Chicago, American Library Association, 1973.



CONDUCTING A COMPUTER SEARCH: THE STRATEGY

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The ERIC Clearinghouses abstract, annotate, index, and catalog educational documents. This material forms the basis of the monthly index, *Research in Education*. Computerized retrieval of the material in RIE's Document Resume Section is facilitated by the formulation of a computer search strategy based on the terms found in the *Thesaurus of ERIC Descriptors*. This article is intended to assist the ERIC user in understanding and formulating an elementary computer search strategy or developing a comprehensive search strategy with the help of a computer specialist.

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McDougall, Ronald N.

Programme Costing - A Logical Step Toward Improved Management.

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Descriptors—*Cost Effectiveness, *Costs, *Educational Accountability, *Educational Finance, *Higher Education, Program Costs, Universities Identifiers—*Canada

The analysis of costs of university activities from a functional or program point of view, rather than an organizational unit basis, is not only an imperative for the planning and management of universities, but also a logical method of examining the costs of university operations. A task force of the Committee of Finance Officers—Universities of Ontario has been developing a methodology for program costing, which can be adopted for use by any of the province's universities. Since program costing is seen as a budgeting tool, the system is being designed primarily for internal management use where its potential is greatest. This paper discusses some concepts and misconceptions of program costing, and outlines the characteristics of the proposed system: emphasis on definitions and allocation rules, the costing of support functions and the identification of their contribution to the costs of instruction, research, and community service, the separation on nonspecifically funded research from instruction, and the realization that the costs derived are historical average expenditures rather than accurate or standard costs. (Author)

WHAT IS A SEARCH STRATEGY?

A *search strategy* is the use of terms arranged in a logic set and structured to retrieve material on a particular topic. To *negotiate* a search strategy with a computer specialist requires the person requesting the search to present to the computer specialist a clear idea of the topic and desired results.

To negotiate a search strategy, the user must first determine what he wants the computer to retrieve. The computer is not human; it responds only to the question and descriptors submitted. It will not reformulate or correct any errors. Thus, the first step would be to formulate a question; for example, What are the community's attitudes toward the financing of post secondary education? The next step for the requestor is choosing terms that will pinpoint the desired subject area. Three major types of terms must be considered: *subject area*, *target group*, and a *leveling term*. The subject area indicates

the major concern of the documents desired, for example, in the above question, the subject area is Educational Finance. The target group is the grouping of people the question refers to, in this case it would be the community—the term Community Attitudes would be applicable. Finally, the leveling term specifies grade or educational level, in this case the leveling term would be Post Secondary Education. Each of these three area will be expanded in the search strategy and prepared in a logic set.

HOW TO CHOOSE THE TERMS USED IN A SEARCH STRATEGY

The documents that comprise the ERIC data base are indexed with terms in the *Thesaurus of ERIC Descriptors* and identifiers listed in the *ERIC Identifiers Term Posting & Statistics for Research in Education*.

The *Thesaurus of ERIC Descriptors* is the primary tool for finding valid descriptors applicable to the subject area. Descriptors from other indexing systems or "coined" terminology are not acceptable. If unacceptable word forms are submitted, the computer will reject the entire search strategy. This will necessitate a reformulation of the search and cause a time delay.

To choose the terms that will pinpoint your topic, the Thesaurus will indicate broader terms (BT), related terms (RT), and narrower terms (NT). In a computer search strategy this hierarchy of descriptors will enable the searcher to zero in on a particular subject area. The decision to employ a BT, NT, RT is based on the type of search being conducted. In a search on the financing of postsecondary education, the searcher is interested in any aspect of educational finance. The use of both broad and related terms may be advantageous. If the searcher were interested solely in the area of program or instructional cost, it would be to his advantage to use the descriptors Program Costs or Instructional Costs, thus narrowing the subject field. The term Educational Finance, in this case, would retrieve a great deal of extraneous material.

EDUCATIONAL FINANCE	220
UP EDUCATIONAL SUPPORT	
FINANCE	
SCHOOL FINANCE	
NT FULL STATE FUNDING	
NONPUBLIC SCHOOL AID	
BT EDUCATIONAL ECONOMICS	
BT BIDS	
BOND ISSUES	
BUDGETING	
BUDGETS	
CAPITAL	
CAPITAL OUTLAY (FOR FIXED ASSETS)	
COSTS	
EDUCATION	
EDUCATIONAL ADMINISTRATION	
EDUCATION VOUCHERS	
EDUCATIONAL AID	
EXPENDITURE PER STUDENT	
EXPENDITURES	
FEDERAL AID	
FELLOWSHIPS	
FINANCIAL NEEDS	
FINANCIAL POLICY	

FINANCIAL PROBLEMS
FINANCIAL SERVICES
FINANCIAL SUPPORT
FISCAL CAPACITY
FOUNDATION PROGRAMS

GRANTS
INCENTIVE GRANTS
PROGRAM BUDGETING
PROPERTY TAXES
PROPRIETARY SCHOOLS
PURCHASING
REVENUE SHARING
SALARY DIFFERENTIALS
SCHOLARSHIPS
SCHOOL ACCOUNTING
SCHOOL BUDGET ELECTIONS
SCHOOL DISTRICT SPENDING
SCHOOL FUNDS
STATE AID
STUDENT LOAN PROGRAMS

EDUCATIONAL GAMES 270
OF ACADEMIC GAMES
HEURISTIC GAMES
NT READING GAMES
ST GAMES
ST CHILDRENS GAMES
CLASSROOM GAMES
INSTRUCTIONAL MATERIALS
PUZZLES

Another aid to finding descriptors applicable to the topic is the *Rotated Descriptor Display*. The Display, located at the back of the Thesaurus, lists each word of the descriptor in the appropriate alphabetic sequence. If you have an idea for a descriptor, you may consult the Display and find the appropriate terminology to be used. For example, if the searcher is looking for a term concerning financing, finance would be listed in the alphabetical order with the term educational preceding it.

CREDIT (FINANCE)
EDUCATIONAL FINANCE
FINANCE OCCUPATIONS
RECREATION FINANCES
FINANCIAL NEEDS
FINANCIAL POLICY
FINANCIAL PROBLEMS
FINANCIAL SERVICES
FINANCIAL SUPPORT
PRIVATE FINANCIAL SUPPORT
TRUSTS (FINANCIAL)
FINE ARTS
FINES (PENALTIES)
FINGER SPELLING
FINISHING
FINNISH

Another aid in formulating computer search strategies is the *ERIC Descriptors: Term Posting & Statistics for Research in Education*. The Term Postings enables the searcher to see the number of times a particular descriptor has been used and evaluate its potential value in a search strategy. If a descriptor has been used only four times, it would hardly be worthwhile to include it in a computer search. The Term Postings indicate both the ED (ERIC document) number for each usage and the number of times the descriptor has been used as a major or minor term.

This brings us to an important part of the search strategy — major and minor descriptor usage. When a document is indexed the indexer looks for key words in the title. Major descriptors are assigned according to subject emphasis in the title and content, a leveling term and a target group. Major descriptors, when assigned, are preceded by an asterisk (*) to indicate their importance. A computer search strategy designed to retrieve major descriptors will use the asterisk to indicate that major descriptors are desired. The minor

descriptors are assigned as terms complimenting the major descriptors in an overview of document content and are not preceded by an asterisk. When conducting a computer strategy, it is wise to imagine the position of an indexer — how would you index a document concerning your topic area? This process can assist a searcher to obtain a better perspective on the terms used to index documents. By knowing the extensive usage of Educational Finance (1,416 times), the search strategy could be limited by programming the computer to search for Educational Finance as a major descriptor (666 times). This manipulation of major and minor descriptors can bring the search results into a more manageable focus.

The *ERIC Identifiers: Term Posting & Statistics for Research in Education* is an additional retrieval aid. Identifiers are designed to supplement the *Thesaurus of ERIC Descriptors* and consists of the names of special projects (PROJECT SEEK), geographical locations (Canada), persons (Piaget), trade names, educational or statistical tests (WAIS), etc. For example, a document entitled "The Use of the Weschler Adult Intelligence Scale in Canada" may have as descriptors — Testing, Adults, Intelligence Scales, Foreign Countries, etc. The identifiers, WAIS and Canada would provide a more comprehensive indexing form. If a computer search on the WAIS in Canada were desired, the printout would contain only those documents having both terms as identifiers. Identifiers may be correlated with descriptors to provide the broadest possible range of documents which may be retrieved.

HOW TO FORMULATE A COMPUTER SEARCH STRATEGY

Now that the background material concerning searching has been discussed, how is the search strategy actually begun? First the searcher *formulates a question*. The question should pinpoint the desired subject area, the target group, and encompass a leveling term. *Descriptors and identifiers are then chosen* to direct the search strategy. This step requires that the searcher go to the *Thesaurus of ERIC descriptors*; the *ERIC Descriptors: Term Posting & Statistics for Research in Education*; the *ERIC Identifiers: Term Posting & Statistics for Research in Education*; and/or the *Rotated Descriptor Display* to choose applicable descriptors and identifiers in the subject area. Finally, the actual search strategy is drawn up.

The computer search strategy is not unlike a logic set. Descriptors are grouped in similar categories and manipulated by "And/OR" logic, for example, $A + (B + C)$; $(A + B) + C$; $(A \text{ or } B) + C$; etc. The searcher must keep in mind that no two indexes will necessarily index a document using all the same terms. Thus, in formulating the search, as many terms as possible should be used to cover the subject area.

To facilitate the explanation, a search question may be: What are the community's attitudes on the financing of postsecondary education? Three different categories encompass the leveling term (postsecondary education), the target group (community attitudes), and the subject area (educational finance). Each of these categories is called a *search statement*. Let us call the leveling term category, search statement A; the target group, search statement B; and the

subject area, search statement C. The search strategy used might appear as follows:

A	AND	B	AND	C
*Budgeting or *Educational Finance or *State Aid or *Statewide Planning or *Financial Problems		*Post Secondary Education or *Higher Education or *Junior Colleges or *Community Colleges or *Vocational Education		*Opinions or *Public Opinions or *Majority Attitudes or *Community Attitudes or *Social Attitudes or *Attitudes

A strategy concerning the effects of stimulus deprivation on a child's learning can be designed to cover the areas of learning, children, and stimulus. The strategy might appear as follows:

A	AND	B	AND	C
*Stimulus Behavior or *Sensory Experience or *Verbal Stimuli or *Visual Stimuli or *Stimuli		*Academic Performance or *Academic Ability or *Academic Achievement or *Learning Characteristics or *Student Development		*Children or *Preschool Students or *Elementary School Students

The computer will search the data base and retrieve documents that have any descriptor from search statement A, AND any descriptor from search statement B, AND any descriptor from search statement C. Any document that has at least one descriptor from each of the three search statements will be retrieved; if it has descriptors from only two of the three search statements, it will not be retrieved.

Any combination of descriptors with at least one descriptor from each column will be considered a "hit" or a citation that

has fulfilled all the criteria of the search strategy and will subsequently appear on the final *printout* sheet. If a computer specialist indicates that you have received 101 hits, you have 101 document citations with bibliographic data and abstracts, all of which should be in your search area.

COMPUTER CAPABILITIES

Computer capabilities vary widely to encompass many searchable areas or *fields*. For example, abstracts can be retrieved by four basic fields: author, institution, descriptors, and identifiers. Some computer systems can scan the abstracts of documents searching for key words or descriptors in the abstract. The most frequently used system is the *on-line system* which enables the searcher to be in direct contact with the computer. The typewriter terminal, an on-line device, looks like a typewriter but connects to a telephone receiver. The searcher dials the number of the computer center and is then in direct communication with the computer. Messages and instructions are typed on the keyboard and transmitted over the telephone to the computer. The computer responds to the instructions in a manner similar to that of a teletype machine. The on-line terminal permits the user to retrieve data in a matter of seconds and enables the searcher to see how many hits his search strategy has produced. It is usually too expensive to relay all the abstracts and bibliographic data into the terminal since the user must pay for time in communication with the computer. Thus, the general procedure is to have the material printed at the computer site and then mailed to the requestor.

CONCLUSION

If you follow the steps detailed above, the likelihood of a successful computer search will be increased. Additionally, you should be better able to explain your needs to a computer specialist. The real value of understanding computer searches, however, is the ability to better utilize an important research tool.

LANGUAGES AND LINGUISTICS MICROLIBRARY

by Dolly Svobodny, Projects Coordinator
ERIC Clearinghouse on Languages and Linguistics

The ERIC system has proved to be of significance to the educational community and particularly to those ardent researchers who previously had difficulty in locating the mass of uncontrolled educational literature. In particular, the ERIC collection on microfiche is serving the specialized library of offering a mass assemblage of documents, conveniently stored and retrieved, at a low cost.

For the individual college and secondary teacher, however, full and advantageous use of ERIC remains a formidable task. In many cases, teachers do not have ready access to ERIC on a daily basis. Many college libraries are still without the ERIC materials and so are most of the curriculum centers in the secondary schools. Furthermore, the time and difficulty involved in "searching out" materials relevant to particular needs can be intimidating and discouraging.

Cognizant of the problems facing the foreign language teacher who needs to use ERIC, Warren C. Born, Director of the MLA/ERIC Clearinghouse on Languages and Linguistics, and Arthur D. Kramer, Vice President of Microfiche Publications (New York), proposed the development of the Languages and Linguistics MicroLibrary.

The MicroLibrary is a complete and wide-ranging collection of ERIC documents on aspects of languages and linguistics designed for teachers and researchers; high school, college, and university libraries; foreign language departments at all levels; professional associations; and information centers. The unique collection is especially well suited for the foreign language department or the special research center, such as the Alvina Treut Burrows Language and Reading Research Collection (LARC) at New York University. LARC's concern is to develop an interdisciplinary approach to the study of language and reading.

"The Languages and Linguistics MicroLibrary is perfect for our needs," reports Dr. Bernice E. Cullinan, New York University Professor of Education, and LARC Chairman for 1973. "This opportunity to purchase certain fully indexed categories on aspects of linguistics and TESOL enhances our core collection without expending large sums for research, computer searches, and ERIC documents not pertinent for our users." Dr. Burrows, the well-known author on child language and reading for whom the Center is named, agrees with this appraisal.

The MicroLibrary was compiled by Dolly D. Svobodny of MLA/ERIC, and includes significant documents abstracted in *Research in Education* from 1966 through 1972 in the field of languages and linguistics. There are about 4300 titles dealing with foreign language methodology, the psychology of language learning, cultural and intercultural approaches, applications of linguistics, curricular problems and developments, and the training and qualifications necessary for the teacher of foreign languages. Also included are materials covering psycholinguistics, theoretical and applied linguistics, pedagogy, bilingualism, commonly and uncommonly taught



Each of the 16 specialized categories in the Languages and Linguistics MicroLibrary has a complete bibliography of abstracts. Shown here are 8 of the 16 indexes included with the microfiche collection or sold separately for \$9.95.

languages, and English for speakers of other language. Among the documents included are articles, research reports, instructional materials, teacher guides, and curriculum guides. The MicroLibrary sells for \$1,995, and includes hardcopy indexes with abstracts.

The collection is organized into 16 detailed subject categories covering the main topics of the discipline. Each of the specialized categories includes its own printed abstract index, and costs less than that of two average computer searches of the same material. Individual indexes of the categories are available without the microfiche and are of special interest to the institutions with the full ERIC collection. The entire set of indexes, or bibliographies of abstracts, without the microfiche is \$99.50. Individual indexes of the categories cost \$9.95.

The categories and the prices include:

BILINGUALISM: Documents on basic research, bilingual schools, programs, students and teachers, and bilingualism as found in speakers of American Indian, Chinese, French, Japanese and Spanish. Approximately 575 titles. \$235.00.

CLASSICAL LANGUAGES: Classical literature and the teaching of Latin and Greek. Approximately 150 titles. \$65.00.

CULTURE AND LITERATURE: Titles on the teaching of literature and curriculum in the Afro-Asian, French, German, Spanish, Italian, Latin, and Slavic Languages. Approximately 650 titles. \$265.00.

CURRICULUM GUIDES AND SOURCE LISTS: Documents on Chinese, French, German, Hebrew, Italian, Latin, Russian, Spanish, and General Bibliographies. Approximately 450 titles. \$185.00.

ENGLISH AS A SECOND LANGUAGE: Titles on the teaching of ESOL; institutes, linguistic models, vocational English, and instructional materials. Approximately 420 titles. \$175.00.

FOREIGN LANGUAGES IN ELEMENTARY SCHOOLS: Titles on teaching French, Italian, Japanese, Norwegian, Russian and Spanish; surveys of FLES practices, policies, enrollment, programs, teachers, and cost factors. Approximately 150 titles. \$65.00.

INTERNATIONAL EDUCATION: Reports on foreign educational systems, international exchange and study abroad, international organizations, language and area centers, and appropriate bibliographies. Approximately 260 titles. \$110.00

LINGUISTICS: Titles dealing with linguistic studies of the American Indian, Chinese, English (Second Language), German, Hindi, and Swedish languages. Approximately 385 titles. \$160.00.

MEDIA: The use of language laboratories, resource centers, television, radio, film, newspapers, audio-visual aids, and microforms in language teaching. Approximately 250 titles. \$105.00.

PROGRAMMED INSTRUCTION: Items on computer-assisted instruction and technological instruction. Approximately 175 titles. \$75.00.

PSYCHOLINGUISTICS: Publications of a broad and theoretical nature; specific suggestions on teaching techniques, practices, and basic research. Approximately 250 titles. \$105.00.

STATISTICAL STUDIES: Data on entrance and degree requirements for foreign language programs, majors, teaching practices, program enrollments and registrations. Approximately 175 titles. \$75.00.

TEACHER EDUCATION: Innovative programs, practice teaching, teacher preparation, qualification, certification, and attitudes. Approximately 260 titles. \$110.00.

TEACHING METHODS AND TECHNIQUES: Teaching the skills of writing, reading, listening, speaking and vocabulary; audio-lingual and traditional methods of language teaching. Approximately 440 titles. \$180.00.

TESTING IN FOREIGN LANGUAGES: General testing, placement, and proficiency tests. Approximately 210 titles. \$90.00.

UNCOMMONLY TAUGHT LANGUAGES: Indo-European, African, Afro-Asiatic, Uralic, Altaic, Sino-Tibetan, South and Southwest African, Australian and Oceanic, American Indian, Pidgin, and Creole languages. Approximately 670 titles. \$525.00.

The Microfiche Publications, a division of Microfiche System Corporation, located at 305 East 46th Street, is a company which produces and distributes information on microfiche. Besides the MLA/ERIC collection, Microfiche Publications offers its readers ERIC documents from the Science, Math, and Environmental Education collection; the Stanford Media and Technology MicroLibrary; and the CLIS series (Library and Information Science). Additional publications include "Presidential Papers", "NAPS", "The Human Environment", and the highly successful "Envirofiche".

Mr. Kramer of Microfiche Publications sees a great potential in the Languages and Linguistics MicroLibrary and is enthusiastic about the "repackaging concept" in micro-publishing. The MicroLibrary facilitates the use of ERIC by grouping available documents into specific categories, thereby reducing the number of research hours needed to locate vital information. The increased efficiency promises to further the use of ERIC and to extend the services of the system. In addition, the mutual endeavor between MLA/ERIC and Microfiche Publications illustrates a key feature of ERIC in that it demonstrates the cooperation of the federal government and the private and commercial sector in implementing an information system. The initial success of the joint project suggests exciting possibilities for similar undertakings in other areas and points to expanded use of the ERIC system.

NOTE: As of June 1, 1974, the ERIC Clearinghouse for Language and Linguistics will be housed at the Center for Applied Linguistics, Arlington, Virginia. The project described in this article will be continued at that center.



WASHINGTON REPORT

ERIC CLEARINGHOUSE CONTRACT COMPETITIONS

During the early part of 1973, the National Institute of Education established a requirement for all ERIC Clearinghouse to undergo a competition to determine whether the same or a new host institution should be awarded the clearinghouse contract. This round of competitions began in fiscal year 1974 and will be completed in fiscal year 1975.

During fiscal year 1975 a total of twelve clearinghouses will be thrown open to competition. The following schedule indicates the approximate key dates which will apply:

Clearinghouse	Closing Date for submission of proposals	Target Date for award of contract	Start Date
Higher Education	June 10, 1974	Aug. 1, 1974	Sept. 1, 1974
Urban Disadvantaged	June 10, 1974	Aug. 1, 1974	Sept. 1, 1974
Counseling and Guidance	Sept. 20, 1974	Nov. 15, 1974	Jan. 1, 1975
Educational Management	Sept. 20, 1974	Nov. 15, 1974	Jan. 1, 1975
Junior Colleges	Oct. 2, 1974	Nov. 25, 1974	Jan. 1, 1975
Science, Mathematics, & Environmental Education	Oct. 2, 1974	Nov. 25, 1974	Jan. 1, 1975
Social Studies/Social Science Education	Oct. 11, 1974	Dec. 2, 1974	Jan. 1, 1975
Tests, Measurement, & Evaluation	Oct. 11, 1974	Dec. 2, 1974	Jan. 1, 1975
Early Childhood Education	Nov. 7, 1974	Dec. 31, 1974	Feb. 1, 1975
Teacher Education	Dec. 2, 1974	Jan. 31, 1975	Mar. 1, 1975
Rural Education & Small Schools	Jan. 2, 1975	Feb. 28, 1975	Apr. 1, 1975
Reading & Communication Skills	Jan. 31, 1975	Apr. 1, 1975	June 1, 1975

It should be emphasized that the above dates are planning dates and should not be regarded as a commitment by either Central ERIC or NIE.

Copies of the Request for Proposals for each of the competitions will not be available until the date announced in *Commerce Business Daily*. This will be approximately 8 to 10 weeks prior to the closing date indicated above. All prospective bidders are required to send written requests—letter or telegram—to the NIE Contracts and Grants Office. Telephone requests will not be honored.

Any questions concerning technical aspects of the Requests for Proposals must be submitted in written form to the NIE Contracting Officer. Questions of an administrative variety should also be directed to the contracting officer. Central ERIC personnel are prohibited from engaging in any discussion concerning the Request for Proposals subsequent to their issuance.

Thus far there have been four contractual actions. In two of the actions Central ERIC combined two of the clearinghouses into one: Adult Education and Vocational and Technical Education were combined into Career Education; then Educational Media and Library and Information Sciences became Information Resources. The ERIC Clearinghouses on Exceptional Children, formerly funded by the Office of Education, went through a competition under NIE auspices and became the Clearinghouse on Handicapped and Gifted Children. Listed below are the competitions completed thus far:

Clearinghouse	Host Institution	Start Date
1. Handicapped and Gifted Children	Council on Exceptional Children	Sept. 1, 1973
2. Career Education	Northern Illinois University	Sept. 17, 1973
3. Information Resources	Stanford University	Jan. 1, 1975
4. Languages & Linguistics	Center for Applied Linguistics	June 1, 1974

PROSPECTIVE NAME CHANGE FOR RESEARCH IN EDUCATION

"ERIC's goal is to make a broad spectrum of information on education available to the entire educational community, which includes administrators, policy makers, program planners, scholars, researchers, information specialists, librarians, and students at all levels, with special emphasis placed on serving the needs of the educational practitioner." This statement accurately reflects aims which ERIC has had for some time as opposed to earlier ones which put primary emphasis on meeting researchers' needs. To meet this more recent goal, the scope of education information contained in *RIE* has widened considerably. Whereas the periodical could once be described as a "monthly abstract journal announcing recently completed research and research-related reports in the

field of "Education," this is too narrow a definition of the kinds of documents *RIE* announces today. Since it now contains abstracts of screened fugitive literature, reports, curriculum guides, bibliographies, and books, in much greater proportion to research reports, ERIC has decided to emphasize the ever broadening coverage by modifying the name of the journal.

As of the January 1975 issue, which will start volume 10 of the yearly series, *Research in Education* will become *Resources in Education*. Central ERIC is making this announcement well in advance of the date for the change so as to give members of the ERIC family ample time to prepare themselves, their old and new users, and the professional organizations with whom they are connected. It is expected, for example, that announcements would be sent in good time to appropriate professional journals, especially those which would alert the library community. The changeover will require corrections in card indexes and bibliographic citations that are important throughout the ERIC system and elsewhere. Central ERIC will inform all standing order customers, and subscribers will be notified via GPO. Also, an announcement flyer will be prepared at Central ERIC which clearinghouses will receive in goodly number for their own distribution by mid-August. A notice will be inserted at the front of *RIE* itself starting with the September issue. At meetings or workshops this summer and fall, when reference is made to the new title, assurance can be given of the continuity of *RIE* as well as the ongoing emphasis on the broadened concept which the word "Resources" implies.

EDUCATIONAL INFORMATION SYSTEM REQUIREMENTS

The National Institute of Education (NIE) has recently asked for proposals to conduct a study that will specify requirements for a comprehensive educational information system. These specifications are to be based on:

1. Analysis of the content and accessibility of existing information resources that are useful in planning, designing, or implementing educational practice, research, or development;
2. Analysis of the market for educational information in the various communities concerned with American education (policy-makers, administrators, researchers, planners, teachers, students, and the public);
3. Synthesis of the information developed in the analysis of resources and market to develop specifications for the proposed comprehensive system.

The requirements specifications will be the major outcome of this study; they will be used as a basis for the subsequent design of improved information services for the education communities. Ultimately, that design will provide the basis for development of improved services by modifying, replacing, or re-configuring existing services or systems.

The objective of this study, and of the design and implementation phases that will follow it, is to develop effective and comprehensive information programs to serve the educational community. Present services, including activities of the Education Resources Information Center (ERIC), are expected to be incorporated in the new and improved program. Specifically, the system to be developed will not replace ERIC or other existing services. Rather it will build upon those services where possible, modify or add to them

where necessary, and convert the present mix of services into a better integrated and more comprehensive system.

This study, itself, will have two outcomes. The primary product will be a statement of the requirements for a comprehensive educational information system. As a secondary outcome, a methodology will be developed and documented for periodically sensing the information requirements of the educational community. In addition to reports for each of those outcomes, the contractor will be expected to prepare separate papers to describe:

- educational information resources
- the market for educational information

Closing date for the competition was May 10, 1974. NIE plans to select a contractor prior to June 30.

ERIC VOCABULARY IMPROVEMENT PROGRAM

(CURRENT STATUS)

PURPOSE

To eliminate ambiguous, outmoded, unused terminology in the ERIC System.

Emphasis is on continuous, long-term improvement. Recommended changes in vocabulary conventions, vocabulary structure, and the basic terminology are solicited from all components and users of the system.

PROGRESS TO DATE

1. In 1972, the ERIC Facility completed and tested transfer-and-delete software for the efficient merging of terminology.
2. In mid-1973, a nationwide Vocabulary Review Group was established to evaluate changes recommended by users. The group consists of 17 Clearinghouses (including Macmillan), 10 university libraries, and 9 agencies of state education departments. Each of these organizations volunteered to participate by responding to an invitation from Central ERIC and appointing a Vocabulary Coordinator to review recommended changes.
3. Two transmittals, consisting of 9 Term Change Notices, have been distributed to and returned by the review group. An average of 80% of the group members have participated. The group has approved 7 of these changes; because of "significant" objections (5 or more), the other 2 will be referred to a Thesaurus Advisory Panel for further review.
4. Several Identifier changes have been processed (e.g., variations in Project Head Start) as a small beginning to the proposed major clean-up of the Identifiers.
5. The compositions and functions of the Thesaurus Advisory Panel have been defined. This panel will include a chairperson from Central ERIC, the Facility Lexicographer, at least one local ERIC Clearinghouse representative, two or three representatives of NIE and OE, and two to four representatives from other public or private agencies. The panel will review all changes on an "information only" basis, determine disposition of contested changes, make recommendations to Central ERIC on vocabulary-related policy matters of a short-range nature requiring "immediate" action, and record, review, and recommend viable alternatives in long-range *Thesaurus* development.

CURRENT PLANS

1. The 7 currently approved Term Change Notices will be processed in time for the June 1974 release of the working copy of the *Thesaurus*. Involved are 9 Descriptors, being either deleted or changed and approximately 600 postings. Transfer-and-delete operations against some Identifiers will also be initiated during this processing cycle. Descriptor changes are to be announced to users in the monthly *Thesaurus* supplement and via Interchange.
2. The Facility Lexicographer currently holds approximately 50 recommended *Thesaurus* changes, being sorted into "significant" and minor changes. Around 70 Term Change Notices ("significant" changes) should be transmitted to the Vocabulary Review Group in 1974. The attempt will be to maintain a reasonably even flow in frequency and quantity throughout the year.
3. The Thesaurus Advisory Panel is being firmly established in anticipation of holding at least 2 meetings in 1974.

FEDERAL LIBRARY OPENING

The National Institute of Education formally opened its Educational Research Library on March 1. The Educational Research Library provides library, technical information and

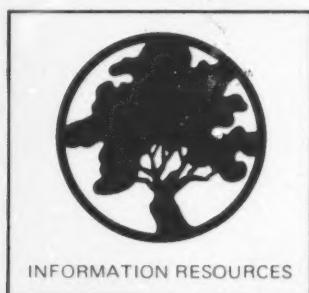
documentation resources and services to the Department of Health, Education, and Welfare (DHEW) Education Division and its constituencies.

The core collection for this new facility is built upon the merger of two other libraries—the Center for Urban Education, New York City, and the education collection of the DHEW Departmental Library.

The Educational Research Library is a component of a "Resource Center" comprising print, non-print and computerized access to educational information. The print collection represents some 130,000 volumes, the non-print over 100,000 documents and periodicals and some twelve literature files are accessible via an on-line computer terminal. An historic collection of rare books and educational textbooks is also available. Together these components comprise a unique resource serving the field of education.

The Educational REsearch Library is located at 1832 M Street, N.W., Washington, D.C. 20208. Library staff include Patricia Coulter, Librarian, Alice Songe, Reference Librarian, Jo Anne Cassell, Technical Information Specialist, Margaret McCarthy, Branch Librarian, and Izetta Browning. Cataloging support is provided by Information Planning Associates, Inc., Rockville, Maryland.

NEWS FROM THE CLEARINGHOUSES



WHAT SHOULD IR COVER?

During these first few months of the existence of the ERIC Clearinghouse on Information Resources, ERIC/IR staff members are busy serving the thousands of educators who have indicated an interest in this "hybrid" field.

Information resources, as defined initially by the Stanford Clearinghouse (and subject to further refinement and alteration), includes print and non-print learning resources, including those traditionally provided by libraries and those provided by the growing number of technology-based media centers.

As ERIC/IR serves both librarians and media/technology specialists, Clearinghouse personnel are particularly focusing on common areas for these two fields, such as instructional materials centers, learning resource centers, library technology (e.g. cable television, computers), and so forth. Although many inquiries are still coming from either strictly the media or strictly the library area, a growing number of educators who contact the Clearinghouse could be classified as interested in the merged area of "information resources."

To explore a bit further, the newly-formed Advisory Board of ERIC/IR made these recommendations concerning the Clearinghouse's new scope:

- The Clearinghouse should not address itself to differences that manifest themselves on a practitioner level, e.g. librarians vs. media people, but address the constituency from an overall conceptual view, e.g. communications, or information transfer.
- Since a number of media and library practitioners are beginning to see themselves as a composite group centering around the concept of a learning resource center, the Clearinghouse needs to make contacts among persons who have this unified approach.
- Particularly with the combined scope, the Clearinghouse cannot expect to reach a large percentage of practitioners directly. It therefore needs to build interpersonal linkages with gatekeepers, and professional organizations are seen as the most significant gatekeepers to reach.

As for possible information analysis product topics in the IR field, the Board suggested the following as general areas of interest:

- Universal bibliographic control, including domestic variations, non-print materials, abstracting and indexing, and machine readable formats.
- Moving from library to learning resource center.
- Affective learning from electronic media.
- Interpretation of standards from school media libraries.
- Analysis of certification for school media librarians.
- Interpretation of "no significant difference" literature on various kinds of instructional media.
- Role of libraries in support of nontraditional education; role of information science in support of nontraditional education.
- Different notions of information networks (on macro and micro levels).
- How states can encourage local districts to spend media funds wisely.
- Manpower needs across interest groups (media/technology, libraries, information science).
- Similarities and overlaps in the education of personnel for interest groups.

Why all this attention to defining "information resources" — its people, its topics, its needs, its concerns? Because ERIC/IR personnel believe it is important to define the Clearinghouse's scope in its early formative months, so as to operate most effectively in future years. The above comments have been advanced as "seed" material, and readers of this *ERIC Report* are urged to react with further thoughts or constructive criticism.

* * *

In case readers believe the staff is only in a thinking stage, and not acting as well, it might be mentioned that four ERIC/IR people attended the national convention of the Association for Educational Communications and Technology. Two gave a continuous workshop on ERIC, with computer-searching done on the spot. Some of the topics which most concerned attendees, and on which searches were done, include: accreditation and certification of media personnel, types of media facilities, standards and manpower development for media, use of videotape for self-confrontation, film libraries, use of media for teaching metrics, and learning resource centers at the community college level. The other two staff members were busy with sub-group meetings, and gathering opinions on how ERIC/IR could be of most use to that field.

The Clearinghouse also has begun working with the American Library Association. Some cooperative publications are being discussed, and a Clearinghouse staff member is giving a workshop at the ALA (AASL) national convention this summer.

ERIC/IR is supplying columns and articles to journals and newsletters in the information resource field, and is interested in hearing from editors or officers of associations which have publications that could benefit from such material.

We sincerely hope that by stating some initial goals and thoughts about ERIC/IR in this article, we can encourage interested ERIC users to write with suggestions and comments concerning their needs. Please feel free to write: ERIC Clearinghouse on Information Resources, ERIC Report Feedback, Stanford Center for Research and Development in Teaching, School of Education, Stanford University, Stanford, California 94305.



SILVER THREADS AMONG THE GOLD

It's not easy growing old! It seems we just finish the aches and pains of growing up, and suddenly the aches and pains of growing old are upon us. ERIC/CAPS is trying to build a counselor's perspective on this long-neglected population. Through a specially-focused *Searchlight* (a series of targeted papers), and acquisition of documents with the most current research and program ideas in the area of aging and dying, ERIC/CAPS hopes to help counselors meet the needs for supportive services for this group.

Leisure time and middle-aged career change are areas which are adjunctive to the concept of aging and which lap into each other in terms of program development for senior citizens— or the third age— or the older adult— or the elderly. Whatever the term, adding age is part of the process, and adding that age with dignity and grace is still the goal. Growing old gracefully, however, is a phrase easily turned off the tip of the tongue, but much less easily dealt with in reality; the intruding concept of death is automatically connected with age. That connection can so easily turn a program of helping the aging into a process of tendering rather than stimulating— dealing with death rather than life.

In 1970 there were about 20 million older people in the United States, a figure expected to increase 46% by the year 2000 to an older population of 29 million. Even that estimate may be conservative as it does not take into account breakthroughs in medicine and biology. However, the figures are not as compelling as the needs which include environmental, physical and emotional well-being. Society dictates a false respect for the wisdom of age. Yet in reality society allows the third age little self-respect physically, socially or intellectually. Problems of poverty, illness and isolation exaggerate the situation of certain members of this population, and all face concerns of housing, personal safety and legal protection, income, and nutrition. Retirement, a status decreed as desirable, represents, once achieved, a multiple loss— loss of work status, loss of work status, loss of companionship through work, and loss of income.

One way of dealing with these realities is the development of a subculture of older adults. The elements basic to the definition of a subculture are: affinity for others on the basis of friendship, common backgrounds and interests, common problems and concerns; and exclusion from interaction in significant ways with other groups in the population. This definition implies that mutual support and self-help among the aging have the potential to flower once the seeds of a subculture have been planted. Special offerings in education are seen as one way of stimulating the growth and strengthening of this subculture. The community college, because it aims at serving people of all ages, is a logical place to begin. Through coordination with community agencies, new services can be defined and developed.

The most common educational offering at this time is at the university level—university coursework with no or very low tuition for those over 65. The University of Kentucky offers several programs for the elderly. One is tuition-free coursework on the basis of space available. Another is a continuing education program planned on the basis of interest of the older students. Another program is a special Writing Workshop which has been successfully conducted for five years. Entrance to the Writing Workshop for People Over 57 is selective on the basis of sample manuscripts, and those admitted have a chance to develop their own life experiences through skills in writing fiction and non-fiction. An education program for older persons at Farleigh-Dickinson University has resulted in a unity of spirit obvious through their newsletter. The program has also fostered development of an information library on housing, transportation and health for the aging, and preparation of special reports for the public.

Educational programs are also being implemented through agencies outside the university. The Pre-Retirement Planning Center in Des Moines, Iowa offers a seven-week series of programs covering such post-retirement topics as estate planning, company fringe benefits, Social Security- Medicare, and psychological aspects of retirement. Involving people in social action is another way of meeting the needs of the third age. The ACTION Retired Senior Volunteer Program is one of the largest such projects for this age group. Older adults are involved in foster grandparent programs, serving, for example, in five homes for the mentally retarded in Pennsylvania alone. Through special training in conjunction with the American Association of Retired Persons, RSVPs are working as Volunteer Income Tax Aids. Programs of these kinds have surged from 11 in 1971 to 590 in 1973.

In these ways, the needs of the third age subculture are beginning to be met, but what is being done about education the first and second age in their attitudes toward the elderly? One example of what is happening is the Gerontology Research Instructional Program developed and implemented in Dallas, Oregon. The goal has been to change attitudes toward older citizens through educating teachers to educate children on the process and problems associated with aging. Another program describes placing problem high school students in nursing homes one morning a week and having them direct physical exercise units under the supervision of a physician and physical education instructor.

These programs as well as other research and support projects for the aging will undoubtedly increase in number, partly as a result of the strengthening of a subculture that has not only the voice with which to speak but the clout with which to make itself heard.



SEARCHING FOR MANAGERS

The ERIC Clearinghouse on Educational Management has a new way to help users. Aware of the ever-increasing demand for information retrieval, the Clearinghouse has recently initiated the School Management Information Retrieval Service (SMIRS).

SMIRS is not just another pretty acronym. It is a systematic way of dealing with requests for information from professional educators and students, particularly in the realms of management and facilities.

On receipt of an information request, SMIRS staff members assess the best means of retrieval on that topic. Then one or more types of information sources — from publications to a computer search — are suggested to the client.

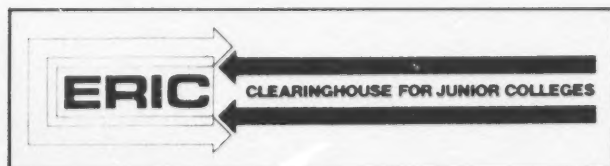
For instance, one SMIRS inquiry about administrator education and preparation was met with a series of monographs prepared jointly by ERIC/CEM and the University Council for Educational Administration (UCEA). Research reviews, analyses, and bibliographies on many topics are also available. When a request falls outside the domain of the Clearinghouse on Educational Management, SMIRS personnel refer the client to the appropriate clearinghouse or to a professional organization or governmental agency, such as the National Association of Elementary School Principals or various state departments of education.

Computer searches provide the best answer to a growing number of inquiries. This procedure is recommended whenever the topic and available resources demand it. On request from the client, the Clearinghouse forwards his letter to the Lane Intermediate Education District (a local agency), which then conducts a computer search. Lane IED's data bank consists of the ERIC "regulars", *Research in Education (RIE)* and *Current Index to Journals in Education (CIJE)* as well as *Abstracts of Instructional Materials in Vocational and Technical Education (AIM)* and *Abstracts of Research Materials in Vocational and Technical Education (ARM)*.

Every effort is made to give the client the most for his money. If a computer search is called for, Lane IED more than earns its \$16 fee by such fringe benefits as helping the client refine his topic for the selection of the best descriptors. In unusual cases, the computer search staff also conducts hand searches of particularly relevant sources not on tape. They're so helpful, in fact, that they refund the \$16 when they know the computer would yield meager results on the topic requested.

Recent successful search topics reported by Lane IED include decision-making for elementary school principals; individualized, computer-assisted mathematics instruction for grades one through twelve; intermediate-level school organization; sociolegal aspects of educational planning; and cognitive achievement in IGE-MUSE (Individually Guided Education—Multi-Unit Schools—Elementary) schools.

The Clearinghouse on Educational Management is continuing its tradition of "aiming to please." With the exception of the computer search, services provided through SMIRS are free to the user. And user services are what ERIC/CEM is all about these days.



INNOVATIONS EXCHANGE

The Clearinghouse for Junior Colleges is now in the final stages of developing an instrument that will allow for the

sharing of instructional innovations among community college faculty. This project is being undertaken in conjunction with the League for Innovation in the Community College, an organization of 44 colleges in 16 districts across the country whose major purpose is to promote and communicate innovation in community college education.

Many writers have acknowledged the difficulty in keeping abreast of a rapidly developing knowledge and technology bank, a gap that exists in all levels of education from pre-school to post-graduate. For the individual, and sometimes isolated instructor, the problem is manifested by lack of awareness of innovations in the particular instructor's discipline. The Innovations Exchange, as it is to be called, is an attempt to connect instructors with new instructional methods and techniques.

Since one of the major values of membership in the League is exposure to new instructional developments among member colleges, and since the Junior College Clearinghouse is directly concerned with all aspects of the community college, the alliance, for purposes of this project, seemed an obvious one. Representatives of the two organizations conducted a pilot project and will soon implement the Exchange.

The Innovations Exchange will function in the following manner: Report forms will be forwarded to League representative in each district by September 1974 to be disseminated to the instructors in their colleges whom they feel are using an innovation that is appropriate for inclusion in the Exchange. The report form provides space for the following information: instructor's name and college, discipline, type of student, credit reference, course description and an innovations check list. The report forms will be returned to the Clearinghouse where the staff will transfer all the information to individual keysort cards.

The next step, planned for October 1974, will be a brochure advertising the Exchange. The brochure will contain an explanation of the project's purpose and all the necessary information to retrieve innovations from the Exchange. Following these steps, the user will contact the Exchange, through the Clearinghouse, and will receive xeroxed copies of the appropriate keysort cards as well as a manual search of the ERIC Junior College collection for other relevant information.

At present, information is being collected only from faculty in League colleges, but it is hoped that in the future the project can be enlarged to accommodate information from all community colleges. Also, it is anticipated that the Exchange will expand to include innovative developments in all areas of community college operation.

ERIC/CRESS

RURAL EDUCATION AND SMALL SCHOOLS

THE INFORMATION NEEDS OF SMALL SCHOOLS

One of the main thrusts this year at the ERIC Clearinghouse on Rural Education and Small Schools is the definition, identification and determination of the information needs of the "small" school. Some definition or delineation is necessary to comprehensively categorize these schools.

The term "smallness" must be discussed in order to properly define a school as small. Many regional schools can be

called small as well as those whose functions or educational direction separate them from the mainstream of American schools. The smallness of an institution may be only in its effect on the students' academic achievement, or on the physical resources present. It may also be a relative term describing the particular position of that school with relation to nearby district or regional schools, or schools with similar academic structures.

There are schools with less enrollment whose students are offered the finest potential education because of excellent availability of resources, both material and educational. Mostly located in urban situations, institutions of this type are usually classified as private academies or special purpose schools.

There are, however, many small urban schools, such as store front, alternative, and religious, whose resources are not so great. In fact, characteristics of the client groups served by these schools are often similar to those of communities served by the small rural school.

There are certain characteristics common to many schools which by virtue of numbers alone place them in the small school category. Initial parameters are usually placed on total numbers for student enrollment. This immediately places a large number of rural schools within the grouping. Often this is due primarily to the location of the rural school, since isolation is a factor greatly affecting the student population figures.

Research indicates that the student enrollment figures for a small school generally run four hundred and under, regardless of the educational level of that particular school. There is a lower pupil/teacher ratio in the small school with the faculty often filling dual roles. A most notable lacking is in the area of guidance and librarians. In many cases, small schools are only able to meet the minimum requirements for curriculum due to population numbers, finances, and other reasons.

Small and rural schools are usually lacking adequate facilities in terms of classrooms, libraries, laboratories, gymnasiums, recreational and health services. Some serve dual functions. Generally speaking, they are inadequately financed, with a limited tax base and a conservative attitude on the part of the community for educational investment. The rural parent often has less education than his urban counterpart. Often, widespread poverty, urban as well as rural, hampers education and has a negative effect on the educational motivation of the people. There is a lack of parental interest and the rural or small community is usually more traditional and resistant to change.

Realization of the lack of in-depth information on the "small" school, its characteristics and information needs, has led the clearinghouse to focus efforts on determining the areas of need and how ERIC can best fill the requirements.

The Educational Research Center of the College of Education at New Mexico State University, at the request of ERIC/CRESS, has been utilizing the resources and services of ERIC since March of this year in an effort to obtain information pertinent to the specific makeup and programs normally associated with a small school. In cooperation with ERIC/CRESS, a questionnaire was designed and disseminated to identify certain characteristics of small schools and also to determine if there are common areas of information needs. A sample of information requested is as follows:

What is the total student enrollment?

Is your location urban, suburban or rural?

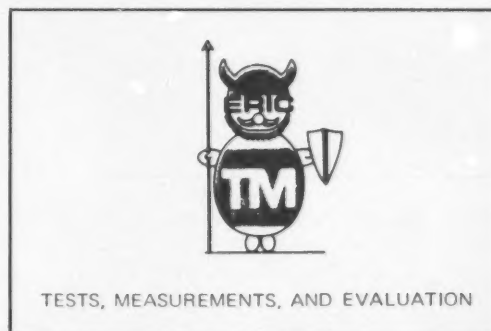
Why do you consider your school small? Facilities, remoteness, etc.

Do you have access to a local information agency's services?

Are you aware of available informational materials and how to get them?

Do you have an in-service educational program for your teachers that could utilize information sources?

A cross-section survey of five hundred schools were selected including public, private, BIA and alternative. Results of the survey will be tabulated and listed by category. A complete report for the project will be completed by mid-summer.



FACULTY EVALUATION MEASURES

The evaluation of teacher performance is one of the most critical topics in education today as increasing emphasis is placed on the quality of the educational experience for all students and the accountability of each component of the educational enterprise. Several of the issues in the teacher evaluation controversy center around the difficulties in quantifying the complex behaviors and skills which are characteristic of the effective teacher or measuring the impact of teacher behavior on the attainment of educational goals by the student.

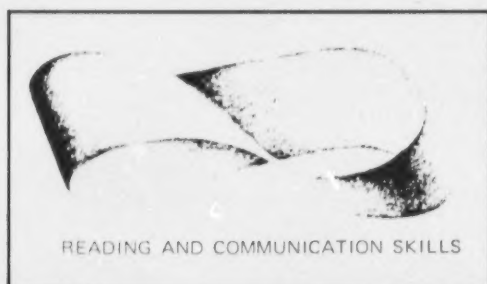
A primary issue is whether the technology of measurement is sufficiently sophisticated to permit a valid and reliable assessment of the complex process of instruction, the attributes and skills of the teacher, or the cognitive and affective growth of students over relatively short periods of time. If these desirable traits, skills, and outcomes can be measured effectively, then appropriate instrumentation must be identified, selected or developed. In addition to reliability and validity, the medium of evaluation must be considered since nationally standardized, locally developed, and criterion-referenced measures have advantages and disadvantages when used in a teacher evaluation program. Another major consideration is the selection or development of methodologies and instruments which will provide data which will facilitate the improvement of teaching skills and the quality of the classroom experience.

A second issue is the manner in which the evaluator influences the methods, outcomes and uses of evaluation data. The techniques of self-evaluation, student, peer, supervision, parent, or independent evaluation may differ significantly. These differences in technique may produce different types of data which may not be complementary, equally reliable or valid.

It is difficult to measure teacher effectiveness without considering whether the student has attained the cognitive or

affective objectives of instruction. However, it is extremely difficult—perhaps impossible—to determine which behaviors or skills resulted directly from the instruction or intervention of a specific teacher. At the same time it may be difficult to account for the extent that extraneous factors impede the attainment of the desired skills in order to avoid penalizing the teacher for such factors.

All of these measurement related problems tend to complicate the institution of formalized teacher evaluation programs. ERIC/TM has received a number of requests for information on measurement concerns in teacher evaluation. The Clearinghouse has expanded its efforts to acquire a variety of documents on this topic and has planned a series of information analysis products and bibliographies.



COPING WITH THE CENSORS

On June 21, 1973 the United States Supreme Court handed down a series of rulings on obscenity which have once more focused national attention on the subject of censorship. Copies of Kurt Vonnegut Jr.'s *Slaughterhouse Five* are burned in a school furnace in Drake, North Dakota and removed from library shelves in Macon, Georgia. An Illinois community bans Edgar Lee Masters' *Spoon River Anthology*. And teachers and school administrators around the country wonder what are their rights and obligations in regard to the censoring of their students' reading material.

When the teacher, department, administration, or school board is faced with a complaint concerning a book or books assigned to a class and the possibility of a censorship court case, the need for established book selection criteria and policy for dealing with such complaints becomes apparent. The following ERIC documents offer some concrete suggestions for establishing criteria and policy information.

The National Council of Teachers of English (NCTE) advocates a formal policy to deal with complaints about books used in the schools. A booklet prepared by the Council's Committee on The Right to Read contains a sample questionnaire for a complainant. Among the questions to be answered are the following: What do you feel might be the result of reading this book? Is there anything good about this book? Did you read the entire book? In its place, what book of equal literary quality would you recommend that would convey as valuable a picture and perspective of our civilization? [Kenneth Donelson, ed. *The Student's Right to Read*, 1972 Edition. ED 068 990. 26p. Available from EDRS; also available from NCTE, 1111 Kenyon Road, Urbana, Illinois 61801—Stock No. 20809, member-\$0.30, nonmember-\$0.35].

In the same booklet, an open letter to citizens stresses that while the teacher must exercise care in selecting works for class reading, he or she must also be free to recommend for

individual reading any work which he feels will have educational significance for the individual student. In addition, the teacher needs the freedom to discuss with a student any work the student reads whether the teacher recommended it or the student found it for himself. Continuing, the open letter warns that when all books which might conceivably offend some individual or group are removed from the curriculum, the teacher is often left with a small group of "nice" books that fail to excite students about the pleasures of reading and the range of cultural perspectives that literature affords.

Two kits produced by the National School Boards Association (NSBA) also provide suggested policy forms for the selection and adoption of textbooks and supplementary materials and for the handling of complaints about instructional materials. The sample school board policies, administrative rules, and information statements contained in the first kit, *Policies for Coping with the Critics: A School Board Policy Development Kit*, demonstrate that boards can welcome ideas from the community, that there are proper procedures for getting a hearing on complaints, and that staff and curriculum will be protected from pressure. A suggested form for the reconsideration of books or teaching materials is included in the kit. [ED 047 364. 28p. MF available from EDRS; HC available only from NSBA, State National Bank Plaza, Evanston, Illinois 60201—Kit #70-60, \$2.00].

The second kit, *School Board Policies on Academic Freedom: Educational Policy Development Kit*, provides board policy samples and other policy resources on academic freedom. The intent is to encourage thinking about policy formulation and to provide working papers that can be edited, modified, and adapted to meet local requirements. The policies for textbook and supplementary materials selection and adoption, for library materials selection, and for handling complaints about instructional materials that are used by several school districts are included as samples from which to develop local policies. Several statements by professional educational organizations relating to academic freedom are also included as models. [ED 078 558. 30p. MF available from EDRS; HC available only from NSBA, State National Bank Plaza, Evanston, Illinois 60201—Kit #73-20, \$2.00].

CAREER EDUCATION? WHAT'S THAT?

As a new clearinghouse in a seemingly new area of educational emphasis, the Clearinghouse in Career Education is confronted by the questions "Career education? What's that?" from the uninitiated, and, from another segment of the education population, "What is CICE doing about career education?"

In the March-April 1974 issue of *ERIC Report*, an introduction to career education was offered through the scope statement of the clearinghouse. In this article, we build on that introduction by exemplifying the materials CICE has so far selected for inclusion in CIJE and RIE.

Among the documents we announced is "Bibliography of Career Education", a non-annotated bibliography containing references to journal articles and documents related to career education from 1965 to 1972. It covers the broad range of subject matter considered relevant to the concept of career education.

Two journals are now accessioned whose primary concern is career education: "Career Education Digest" and "Illinois Career Education Journal". Other journals publish our columns commenting upon the current, relevant materials in career education on a regular basis. These are: "Adult

Education", "Adult Leadership", "American Society of Training Directors Journal", "Catalyst", and "Journal of Extension". In addition, articles pertaining to various aspects of career education appear with increasing frequency in many of the professional journals.

Among the general information articles on career education is an article by Edwin L. Herr discussing some perspectives of career education. A paper presented by Alfred J. Mannebach considers the primary elements needed to initiate a career education program at the local level. Approaches concerning the organization of career education programs are considered—the job clustering concept is presented in an "Occupational Outlook Quarterly" article and a systems approach was reported by the Texarkana, Arkansas, Schools. A book edited by Edwin L. Herr and sponsored by the National Vocational Guidance Association describes several aspects of career education, including current theory and research pertinent to career development. The volume has been accessioned by CICE and will be announced in RIE because of its considerable import, although it will not be available through ERIC.

- CE 000 859 "Bibliography on Career Education" by the Center for Adult, Vocational, Technical and Manpower Education (DHEW/OE).
- "Career Education: Some Perspectives" by Edwin L. Herr. *Business Education World*, Vol. 54, No. 2, p. 18-19, Nov-Dec 1973.
- CE 000 793 "A System for Installing Career Education at the Local Level" by Alfred J. Mannebach.
- "In Career Education, What's Clustering All About?" *Occupational Outlook Quarterly*, Vol. 17, No. 4, p. 16-19, Winter 1973.
- CE 000 773 "A Systems Approach to Career Development" by Texarkana Schools, Arkansas.
- CE 000 940 "Vocational Guidance and Human Development" by Edwin L. Herr, Ed.

Of the many career education programs evaluated are the exemplary project in South Carolina Region Five and the career development exemplary project in Washington, D.C. The development of an instrument to be used in evaluating career education inservice training programs, the Career Education Concept Inventory, is outlined in a report authored by LaVerna M. Fadale and associates.

In addition to the aforementioned material, a number of information analyses have been performed by the Center for Vocational and Technical Education. Two of the topics considered are information resources in career education and career education inservice teacher education.

- CE 000 849 "Exemplary Project in Career Education in South Carolina Region V. Final Report. July 1, 1970– June 30, 1973" by Educational Services Center, Region V, Lancaster, South Carolina.
- CE 000 907 "Career Development Exemplary Project, Washington, D.C. Schools, 1972-73" by Hugh I. Peck.
- CE 000 959 "Career Education Concept Inventory" by LaVern M. Fadale and others.
- CE 000 752 "Career Education: Information Resources. Information Series Number 88" by Jake Huber.
- CE 000 926 "Career Education: In-Service Teacher Education. Information Series Number 92" by Peter G. Haines.

The Center has also issued a paper, authored by Jerry C. Olson and funded by NIE, identifying and describing the role of vocational education in its relationship to career education. The theme of the American Vocational Association's third yearbook is career education. Edited by Joel H. Magisos, the book considers the foundations for career education, the relevant concepts, processes, and programs, the conceptual and operational models, and some perspectives on career education. The book will be announced in RIE because of its high import, but will not be available through ERIC. Career education and its role in specific subject areas has been the subject of numerous reports. Among these subject areas are: social studies, business education, accounting, and agribusiness.

The relationship of career education and adult education was considered in an article by Stanley M. Grabowski of the Syracuse University Gerontology Center. He regards the position of adult educator as an advantageous one in understanding the full dimension of career education since the whole person has always been the concern of that particular field.

- CE 000 751 "Career Education: The Role of Vocational Education" by Jerry C. Olson.
- CE 001 253 "Career Education: Third Yearbook of the American Vocational Association" by Joel H. Magisos, Ed.
- "The Role of Career Education in the Social Studies" by Michael J. Rockler. *Career Education Digest*, p. 19-24, Jan-Feb 1974.
- "The BO-CEC Project" by Harry Huffman. *Business Education Forum*, Vol. 28, No. 5, p. 33-36, Feb 1974.
- "Implementing Career Education Concepts in the Accounting Program" by David H. Weaver. *Business Education World*, Vol. 54, No. 3, p. 12, 13, and 28, Jan-Feb 1974.
- "Supervised Experience Programs in Career Education: A Must in Agribusiness Education" by Harold Binkley. *Agricultural Education Magazine*, Vol. 46, No. 6, p. 129, 139, Dec 1973.
- "Adult Educators and Career Education" by Stanley M. Grabowski. *Continuing Education for Adults Newsletter*, No. 193, p. 1-3, March 1974.

The sample of CICE documents presented here: merely familiarizes ERIC users with the broad range of career education materials available. Also available, but not included because of space limitations, are curriculum guides, conference reports, studies on career choice, job placement, work study programs, and related material. CICE hopes this overview, limited though it is, will make career education and CICE more familiar to ERIC users.

NOTE: ED numbers are not yet available for the documents cited here. Copies may be ordered by CE number from EDRS.



THE ARTIST AS TEACHER

Those who can, do. Those who can't teach.

George Bernard Shaw may not have been the first to use this maxim, but his inclusion of it in his play *Man and Superman* put in permanent form this common questioning of the expertise involved in teaching. American literature is filled with characterizations of teachers such as Ichabod Crane who are witless, inept, and dull and thus unsuited for any other position but teaching. Currently, there is a trend in education to let those who can, teach. This trend is the use of professional artists (those connected with fine arts) as teachers.

The use of professionals as teachers is not new. In the world's history, gladiators, magicians, surgeons, circus performers, all have thankfully been taught their trades by professionals. But in today's educational system, the employment of artists as teachers is more practical and appropriate for transmitting performance skills to students. Utilizing nearly \$2.5 million in 1972 in funding from the U.S. Office of Education and the National Endorsement of the Arts, many programs across the country have worked to put artists in the schools. Three such programs are the Artist-in-Residence Project coordinated by Central Midwestern Regional Educational Laboratory, the efforts of the Teachers and Writers Collaborative in New York, and Project IMPACT.

The Artist-in-Residence Project involved the use of artists as resident art instructors at selected public schools. Different models of the teacher's role were formulated and proposed to the artists and project coordinators for possible use, depending on the specific situation: the teacher/artist, whose activity was actual classroom teaching; the artist/teacher whose activity in teaching was much more informal; and the artist/catalyst who had an open studio and no assigned teaching responsibility. Six artists taught at six sites for one year. The program was evaluated by questionnaires and interviews.

The Teachers and Writer's Collaborative (TWC) is in its seventh year of sending writers as teachers into New York elementary schools. Poet Kenneth Koch has been with the project since 1968 and has written a book on his experience, *Wishes, Lies and Dreams: Teaching Children to Write Poetry*. Of late, TWC is attempting to have its writers get even more involved in school operation.

Where the first two projects have centered their efforts in getting the artists into the schools, the third, Project IMPACT, has laid great stress in getting the schools ready for the artists. In addition to assuming residence and instructional tasks in various schools, artists take an active part in the "retraining" of the teachers, both in workshop briefings of their philosophies and methods and in their encouragement of teachers to observe the classes and even perform themselves. This was done to integrate the artists and their classes into the school's framework. Much of the work of IMPACT so far has centered in the area of dance.

A question that is integral to the whole concept of artists in the schools is, How effectively do professional artists teach in

schools? Evaluation of the various projects has only just begun. Preliminary reports on these programs generally indicate that the artists brought to the schools new life and understandings. But there are also reports of scheduling conflicts due to the artists' informal sessions, bad planning, the resentment of other teachers, and the inability of artists to conform to academic routines. More effective planning and indoctrination might clear some of this up. But of the six artists participating in the CEMREL Artist-in-Residence Project, one was uncertain whether or not he would care to participate again, while two were certain they would not. Artists at Connecticut's first venture in the program expressed similar feelings.

Until more concrete evidence is produced, one must rely on this research and perhaps on general inference made from the nature of the artistic genius. It would seem that professional artists in schools have their strengths as well as their weaknesses. The use of artists in schools has ramifications for all levels of education. Catholic University in Washington, D.C. has a drama department that encourages the employment of professionals in drama as teachers and invites equity actors to perform in productions and even teach a class or two while they are in residence. The department, then, seems torn between whether it is a professional or educational center. With professional actors, directors, and set designers as instructors, the students are able to observe at first hand the techniques of acting, directing, or designing; to share observations and ideas with people who are acknowledged masters of their crafts. On the minus side, these artists may often regard their teaching as "slumming" between equity roles; they may miss classes because they are involved in roles or jobs in Boston or New York. More unfortunate, these theatrical artists may be unable to transcend their art, which is to say, they may have difficulty in making their skills, which are part of their personalities, applicable for student instruction.

One should not ignore the benefits of introducing teachers with expertise in their field to the educational process. But more research still needs to be done on their effectiveness as teachers.

HANDICAPPED AND GIFTED GETTING IT ALL TOGETHER

Sixteen thousand. Count 'em. 16,000 requests! That's the annual number, all right. And all of them are processed by the ERIC Clearinghouse on the Handicapped and Gifted located at the national headquarters of The Council for Exceptional Children in Reston, Virginia. These requests range from information available on careers in teaching handicapped children to more complex searches on educational approaches and studies on culturally diverse people. Because interest in the area of the handicapped and gifted is growing on a national level and because of the litigation of a right to education for every child, the CEC ERIC Clearinghouse attracts administrators, teachers, teacher-educators, researchers, psychologists, counselors, medical practitioners, information specialists, parents, and students who need current information as soon as possible.

The idea of handling so many requests may initially boggle the mind, but under the direction of Joyce Aegerter, the Clearinghouse answers user requests in a concise and thorough manner. Perhaps by taking a look at a cross-section of our users, one can see how their requests are processed.

The largest percentage of our users are those people who

write directly to the Clearinghouse. The second largest group are actually visitors to the center who take advantage of our 12,000 book and document library, and the last group are people who telephone from across the United States for needed materials. Requests are met in several ways. For example, if a person is visiting the center, we probably would begin with a computer search of some kind, or a bibliography on their specific topic. And they, in turn, could go through these materials searching quickly for documents that might be helpful to them. Then we give them a mini course on how to use the collection and then they are on their own to research from that point. We also supply these users with additional xeroxed material — reprints, bibliographies, and things to take with them. Those users who make a request either by telephone or by written communication are served by one or a combination of the methods listed below. If for some reason we are unable to fully satisfy a person's needs, we always try to refer him to other agencies or sources of information.

Sometimes we get as many as two or three hundred requests per month for simple, straightforward career material. To make our job easier, and to facilitate such requests we have a prepared packet which goes out automatically. Let's say a user comes to the Clearinghouse and asks for materials on the gifted and talented. Our staff has collected a basic packet of materials which this user would want. The packet contains four or five brochures and pamphlets explaining the general philosophy about the gifted and talented as well as how to identify a gifted child. Also included is a publication list from CEC and some of the ERIC material involved telling how to order *Research In Education (RIE)* and *Current Index to Journals in Education (CIJE)*. All this information goes into one comprehensive package sent to users interested in the gifted and talented. It is interesting to note that 95% of our user requests are for the myriad of handicapping conditions existent today.

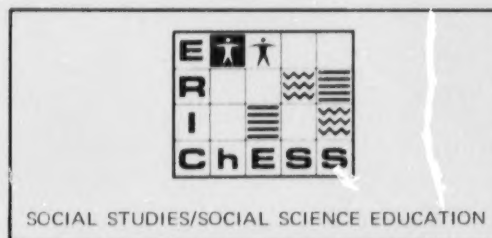
The third type of service, and perhaps the most complex we give to people, is a computer search. Each month the material we receive from around the country is put in computer form and sent to Palo Alto, California, to the Lockheed Company, with whom the Clearinghouse has a contract for an on-line, interactive system called DIALOG. The material is put into the data base and then, in turn, we have the capability of searching our own materials, the CIJE or RIE data base, or the entire ERIC data base. If we were to have a very specific request on career education and the handicapped child or on any other topic, for that matter, a tailored search would be made using the descriptors from the *ERIC Thesaurus*. By using these descriptors we are able to crossreference materials so as to provide the most comprehensive list of resources available.

Another type of user service is our bibliography series. We try to choose topics that are current in the field, but we run into some problems in this choice, especially if the area is rapidly changing. In some cases we do better with a computer search where we can get the most recent material. After we have chosen the topics for bibliographies, we pull everything in the file on the topic; we look through these, selecting documents that are current, relevant, and accessible to people. We select 100 of the most representative documents, or sometimes fewer. These go together in a bibliography that is prepared ahead of time and then, upon request, disseminated into the field. We find they are very useful to people who have general questions, for example, about diagnostic teaching or learning disabilities. In the case of the educable mentally retarded child, for example, we now have two comprehensive bibliographies: one on research, and one on programs. These

bibliographies answer many questions that would not be answered by a pamphlet, but do not necessarily require a tailored search either.

The whole ERIC Clearinghouse on the Handicapped and Gifted is a place of exchange between the generator of information and resources, and those who are in need of the resources. As a Clearinghouse, we try to peruse every tool we can find where materials might be advertised, produced, or available for possible use. This way, we can bring materials from some isolated source and make it available to anyone, or at least announce it so people know that it does exist. Not only are we a place where documents can finally find a home, and from there be advertised and made available to people, but we are also able to pull together many items that come from trade publishers, from periodicals, and from journals.

Our task, as we see it, is an earnest one. By refining our dissemination process, indexing and cataloging materials, and answering requests as thoroughly as possible, the ERIC Clearinghouse on Handicapped and Gifted Children meets the needs for its being — the most current information, the most available source, and an outstanding delivery system.



CONTROVERSY OVER THE NEW SOCIAL STUDIES

Meanwhile, ERIC/ChESS activity continues at a hectic pace. We are most fortunate to have Dr. Bob L. Taylor, Professor of Education at the University of Colorado and current member of the Board of Directors of the National Council for the Social Studies (NCSS), join us as Acting Director. Under his guidance, we are planning a timely project on coping with community controversy over the new social studies. A resolution adopted by the NCSS House of Delegates at its 1973 Annual Meeting cites the urgency for information on this topic. Resolution #73-1 states that "... innovative social studies programs are being unfairly attacked in many parts of the country on a non-objective basis." Another

A MEMORIAL

Since March 2, 1974, we at the ERIC Clearinghouse for Social Studies/Social Science Education have experienced a sense of great loss with the death of our friend, director, and colleague, Dr. Robert S. Fox. As a man of exceptional gentleness, sensitivity, and insight, Bob Fox promoted a standard of excellence and humanism — a standard that our Clearinghouse, inspired by his memory, is eager to maintain. Presently, the Learning Resources Corporation and the Social Science Education Consortium are considering a jointly sponsored memorial publication that will contain a selected collection of Bob Fox's papers as well as statements by former students and colleagues of his valuable contribution to education.

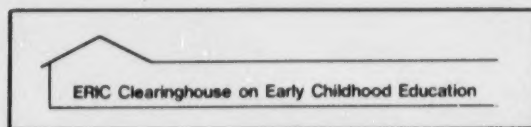
demonstration of our project's timeliness was evidenced by a survey of interest conducted at the 1973 Summer Conference for Secondary and Middle School Supervisors and Middle School Supervisors and Administrators held in Boulder, Colorado. The participating school administrators and social studies specialists gave high priority to the area and stressed the need for a down-to-earth, practical, and thoughtful investigation of community controversy and the new social studies.

The purpose of the ERIC/ChESS project, which will culminate in a publication written by Dr. Arthur Wells Foshay, Professor of Education, Teachers College, Columbia University, is to offer practical guidance to teachers, administrators, and curriculum developers involved in implementing new social studies curricula and consequently facing community controversy. By presenting case studies and preparing guidelines for coping with citizen conflict over innovative social studies materials, our publication will offer assistance in working *with* controversy, not stifling or being overwhelmed by it.

EDUCATIONAL ACCOUNTABILITY AND THE SOCIAL STUDIES

Continuing our services as a Clearinghouse that disseminates information to social studies practitioners and researchers across the country, we are preparing a forthcoming publication on another critical topic occupying the educational spotlight: accountability. After a nationwide survey of state-level involvement with general and social studies accountability programs and a two-day Accountability Conference attended by state department evaluation personnel and social studies specialists, ERIC/ChESS staff analyzed the extent to which individual states have determined educational outcomes, specified educational objectives, measured status of learners, designed educational programs, and developed accountability models. Maintaining the unique emphasis of the publication, ERIC/ChESS writers also investigated how state education agencies have included the social studies in the above-mentioned accountability-related activities.

Two additional items conclude the forthcoming ERIC/ChESS report: a set of guidelines for state departments of education interested in developing accountability programs in the social studies and three appendices. One appendix contains three brief papers prepared by various state department personnel who have had extensive experience with accountability planning. Writing as experienced "insiders," they will relate, in an informal manner with a specific focus on social studies, some of the possibilities and pitfalls of developing state accountability programs.



NOTES ABOUT OUR USERS

A school superintendent telephones to ask for kindergarten curriculum guides. A New Zealand psychologist writes requesting help in preparing a workshop for parents and teachers of preschool autistic children. A Head Start teacher writes for information on planning a playground. A local day

care center director stops by to use our library and talk with staff members. An aide in a senator's office in Washington calls in the hope of finding research to support a pending bill. The regional director in a Texas Office of Child Development office requests ERIC/ECE publications lists and other Clearinghouse products for an upcoming Head Start conference. A parent in California writes for assistance in finding information about her son's learning disability. Students and professors from the University of Illinois campus visit the Clearinghouse to ask for guidance in locating research (via our computer service or by manual check of *RIE*).

These are typical of the variety of requests that might be received by our information services department during an average week. And because of this exceptionally wide range of clientele and type of requests, we feel a real need at the Clearinghouse to provide information not only about the ERIC microfiche collection and data base, but about other information resources as well. Therefore, we are making an expanded effort to become aware of (and keep in touch with) the many specialized information sources — such as national foundations and associations, state and local agencies and libraries, etc. — which may offer additional help to people working in early childhood.

ERIC USERS' CONFERENCE

Each semester, as new students and educators arrive on the campus, we are again reminded of the importance of continuing to expand our ongoing effort to publicize the ERIC system and what it has to offer. Professors bring their classes to the Clearinghouse for group tours, and direct individual students to our library. Word-of-mouth reports about our services lead others to our doorstep. But we still (all too regularly) encounter people who wander into the Clearinghouse by chance and say, sadly, "But why didn't I know about this before!"

In an effort to reach more potential users by reaching the people who work with ERIC microfiche collections, ERIC/ECE proposed setting up an *ERIC Users' Conference* in conjunction with two other Clearinghouses in Illinois: the Clearinghouse on Reading and Communication Skills in Urbana and the Clearinghouse on Career Education in DeKalb. Held June 7 in DeKalb, the workshop was attended by reference librarians, standard microfiche order customers, representatives from teacher education programs, etc. Panel discussions were scheduled on: Facilitating Use of the ERIC System; The ERIC User and Clearinghouse Functions (information services, evaluation and processing); Indexing and Abstracting; and Searching the System — by Machine and by Man.

Featured luncheon speaker was Chuck Hoover, Chief, Central ERIC, National Institute of Education. Staff members from all three Clearinghouses served as speakers and workshop leaders.

* * *

The *ERIC/ECE Newsletter*, previously distributed free of charge, is now (as of the spring issue) available on a subscription basis only: \$2.00 per year for 4 issues, from Publications Office, College of Education/IREC, University of Illinois, 805 West Pennsylvania Avenue, Urbana, Illinois.

USERS SPEAK OUT / LETTERS AND COMMENTS

American Institute for Research
Palo Alto, California

Dear Sir:

The American Institute for Research is conducting a study sponsored by the Right to Read program to locate exemplary reading programs throughout the United States. The most recent one-half search of ERIC (RIE) files for reading programs were obtained, and 61 descriptors were tagged. A random sample of 200 abstracts from a set of 1,053 listed was then independently screened. Criteria for screening each sampled abstract were that instruction in reading or language arts was reported and an evaluation was attempted. Abstracts were sorted as good, questionable and bad. Rater cross-classifications showed about 75 per cent agreement. Abstracts with conflicting "good" and "bad" ratings were then reviewed.

From 1 October 1973 through and including 1 November 1973, George Posey and Roy Jones conducted an ERIC microfiche search to identify "contact" directors, evaluators and/or school district personnel familiar with exemplary reading programs.

One of our concerns was the possibility that most of the people identified as a follow-up source may no longer direct or have knowledge of a given program. However, whenever there was an indication that a program was no longer in operation because of time factors, or federal cut backs, the secondary address, (School District), became an additional lead for program information.

From the original 10,000 printouts, we cross filed with an evaluation component and eventually reviewed (manual) 3,305 abstracts. Out of the 3,305 abstracts, we classified 350 as good programs. These 350 abstracts, as indicated above, were reviewed (microfiche reader) for the purpose of obtaining information leads.

In our search for exemplary reading programs, we have reviewed 10,000, eliminated 9,650 and accepted 350 reports on innovative programs. This process was made possible through ERIC, a national information system dedicated to the dissemination of educational research results, research-related materials, and other resource information that can be used in developing more effective education programs.

Sincerely

George Posey
AIR Researcher

Mr. G. Scott Harrison
819 Calle Del Corte N.E.
Albuquerque, New Mexico 87110

Dear Mr. Harrison:

Thank you for your letter.

Your paper has been processed for announcement and inclusion in the ERIC system. The ERIC announcement journal is *Research in Education*; once a document has been forwarded by the Clearinghouse, approximately three months are needed for publication of this journal (data processing, proofing, printing, mailing).

Please rest assured that matters are proceeding smoothly. If you should wish to refer inquiries regarding availability, please direct them to the ERIC Document Reproduction Service, P.O. Drawer O, Bethesda, Md. 20014. The provisional (Clearinghouse) order number is FL 003 655. The final ERIC citation will begin with an ED prefix.

Your cooperation is appreciated.

Very truly yours,

Warren C. Born
Director, MLA/ERIC

Dear Mr. Born:

While looking through some papers the other day I came across this copy [above letter,] It came to me that this was the last news that I had heard about my paper. Perhaps my letter was misplaced or lost. I really would like to know if and when it was published and under what final number. My mother would be so pleased that I think the old house might see some new wallpaper with ERIC all over it. Thank you for looking into the matter.

Sincerely yours,

G. Scott Harrison

Dear Mr. Harrison:

Thank you for your recent inquiry.

The final ERIC announcement number is ED 071 505. Enclosed is a Xerox of the entry in *Research in Education*. Please feel free to wallpaper the house with ERIC.

Your continued interest in the work of MLA/ERIC is appreciated.

Very truly yours,

Warren Born
Director, MLA/ERIC

Dear Mr. Born:

Hot damn, son of a [expletive deleted], new wallpaper coming up!

Thank you,

G. Scott Harrison
Taif, Saudi Arabia

Dear Sir,

Please send me ERIC Clearinghouse on Rural Education and Small Schools.

Yours truly,

Waterloo Community Schools
Waterloo, Iowa 50702

Director of Acquisitions
ERIC Clearinghouse on Educational
Media and Technology
Cypress Hall
Stanford University
Stanford, CA 94305

Dear Sir:

I am sending you a copy of my dissertation which was completed last year. I can truthfully say that the ERIC system was particularly useful in my literature review and I hope others may benefit from my contribution.

My work was part of an ESEA Title III Project for the implementation and utilization of closed circuit television in a regional consortium of public schools. As part of this effort we carried out a research program which centered around

"teacher centered inservice." I would like to know if you would like to receive a copy of our project report on the longitudinal research program entitled "A Summary of Research in Instructional Television at the Educational Support Systems Center." This report includes an abbreviated history of the development of the teacher centered inservice concept, an article describing its operation, and an evaluation of cognitive change as a result of CCTV experience. All of the materials are unpublished and uncopyrighted.

Sincerely,

Robert M. Jones
Research Associates
Oklahoma Earth Sciences Educational
Improvement System Project
830 Van Vleet Oval, Room 116
Norman, Oklahoma 73069

NEW PRODUCTS AND SERVICES

The following products and services are available from the clearinghouses or as noted. Clearinghouse addresses may be found on the inside back cover.

COUNSELING AND PERSONNEL SERVICES

Impact (The Magazine for Innovation and Change in the Helping Professions) Vol. 3 No. 1.

This first issue of volume 3 focuses on futuristic concerns, and features a presentation by B.F. Skinner made to the Future Worlds Conference in Ann Arbor (Spring 1973), as well as articles by psychologist James V. McConnell and Edward L. Walker, curriculum designer Sheldon Eisenberg, and *Impact* editor and former APGA President Garry R. Walz. Regular *Impact* features include research findings, resources, exemplary programs and Feedfore's look into the future. Single issue \$1.75, Subscriptions (6 issues) \$9.00.

Impact, P.O. Box 635, Ann Arbor, Michigan 48107. (Make checks payable to The University of Michigan.)

THE DISADVANTAGED

"Racial Discrimination Through Mental Testing: A Social Critic's Point of View," by Ronald J. Samuda. *IRCD Bulletin*, Vol. IX, No. 3.

Overviews the testing issue as it affects educational opportunities for disadvantaged children and youth.

Single copies free on request from the Clearinghouse.

An Affluent Society's Excuses for Inequality: Developmental, Economic, and Educational, by Edmund W. Gordon with Derek Green.

Reviews recent work by Theodosius Dobzhansky, Hans Eysenck, Richard Herrnstein, Christopher Jencks, and Arthur Jensen.

Single copies free on request from Clearinghouse.

Nutrition and Mental Development, by Joan Dye Gussow.

Discusses the relationship between nutritional deprivation in infancy and the mental development of the child.

Single copies free on request from the Clearinghouse.

EARLY CHILDHOOD EDUCATION

The Family Day Care Consultant, by Esther Wattenberg (15 pages).

An outline of a work-study project designed to recruit and

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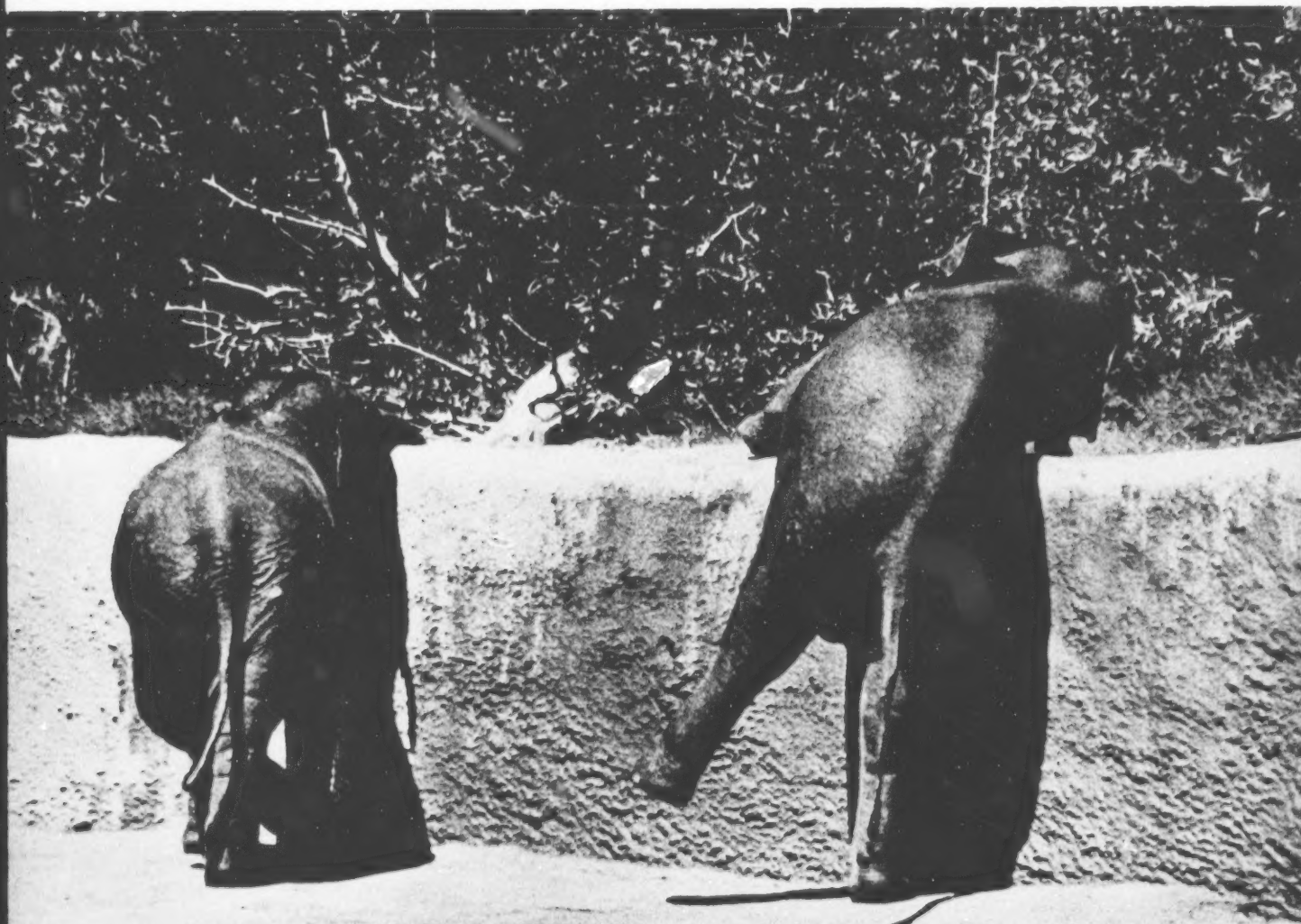
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THE ERIC REPORT

NUMBER 5 NOVEMBER-DECEMBER 1974



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INFORMATION FLOW ON A CRITICAL ISSUE

by Irwin Flaxman
Associate Director
ERIC Clearinghouse on the Disadvantaged

During the past several years the work of a number of educational researchers has re-introduced and underscored the possible involvement of genetic factors in the learning and school achievement of certain segments of the population. At the same time, other researchers and social critics have maintained that schools have proved to be ineffective in bettering the lot of low status individuals. These questions have not remained the concerns of educational professionals alone, but have been argued in the popular media and have affected educational policy-making. For the ERIC system in general, and particularly for the ERIC Clearinghouse on the Disadvantaged, this has meant a strenuous effort to capture and disseminate knowledge in many forms to respond to the widespread need for information on these issues.

Among the scholars whose work has been used to support the importance of genetic differences in educability are Arthur Jensen, Hans Eysenck, Richard Herrnstein, and William Shockley. In the article that set off the controversy, "How Can We Boost IQ and Scholastic Achievement" (*Harvard Educational Review*, Winter 1969), Jensen concludes that compensatory education programs have failed because they have produced only ephemeral changes in the IQ's of participating children. The reason for the ineffectiveness of such programs, he says, is that they are based on an environmentalist approach to the problem of IQ differences. Jensen advocates that we examine the possibility of the genetic determination of such differences, and offers evidence from a number of studies to support the view that a large portion of IQ variability, perhaps as much as 80 percent, can be accounted for by genetic factors. From this line of argument, he suggests that the differences consistently found between groups (e.g., the fifteen point difference between the mean IQ of whites and the mean IQ of blacks) may in fact be genetically based and that attempts to decrease these differences may require the employment of biological techniques rather than those of psychology or education.

Jensen's article sparked an outcry from educators, and the editors of *Harvard Educational Review* published a number of critiques and responses in the Spring 1969 issue. In two subsequent books, *Genetics and Group Differences* (N.Y.: Harper and Row, 1972) and *Educability and Group Differences* (N.Y.: Harper and Row, 1973), Jensen has reiterated his position and attempted to answer his critics.

Hans Eysenck's *The IQ Argument: Race, Intelligence and Education* (London: Temple Smith, 1971) supports Jensen's

arguments but gives greater consideration to a definition of race in dealing with racial differences and more consistently presents a hereditarian explanation for group differences. He also speaks to the importance of high IQ for education, especially higher education. Maintaining that the abilities associated with high intelligence are essential for higher academic success, he considers it unreasonable and unwise for any racial group to disregard the importance of IQ for academic success. He stated that for this reason as well as others, policies aimed at providing proportionate racial representation in colleges and universities without regard for IQ are misguided.

One possible solution to the problem presented by children exhibiting low intelligence is offered by William Shockley. (See for example *Phi Delta Kappan*, Jan. 1972, 297-307.) He has asked us to consider as a "thinking exercise," the possibility of eugenic control to limit the production of such individuals through a voluntary, remunerated sterilization program. Shockley, basing his arguments on the same data that Jensen used to determine the heritability of IQ, arrives at the same conclusion, namely that IQ has a heritability of 80 percent and also that the average IQ difference between black and white populations in the United States is genetic in origin. This, together with the fact that those members of the population who are most deficient in IQ tend also to be more prolific breeders than those more well endowed genetically, raises the spectre in Shockley's mind of a "down breeding" of the total population in intellectual ability.

In an article titled "IQ" appearing in the September 1971 issue of *The Atlantic*, Richard Herrnstein embarks upon an exploration of the social consequences of the heritability of intelligence. He suggests that the heritability of intelligence along with other available information concerning the differences in IQ between racial groups does not provide sufficient evidence for accepting a genetic basis for such differences. Consequently, he limits his discussion to social class differences, and makes much of the data obtained for the most part from Terman's *Genetic Studies of Genius*, relating IQ scores to a number of outcomes including amount of schooling, high status occupations and high incomes, all of which relate to social class. Given the possibility that differences in mental abilities are inherited, that success requires these abilities, and that earnings and prestige depend upon success, Herrnstein speculates on what will likely occur in a society in which environmental obstacles to intellectual development are

increasingly reduced and where social mobility is facilitated as traditional barriers are toppled. In such a society, the possibility exists that the heritability of intelligence will increase and thus tend to increase the stratification of society, precipitating as he puts it, "a low-capacity (intellectually and otherwise) residue. . . ."

The question of unequal distribution of the resources of society, which Herrnstein sees as being largely determined by the unequal distribution of IQ, is again brought into focus by Jencks, in his book, *Inequality: a Reassessment of the Effect of Family and Schooling in America* (N.Y.: Basic Books, 1972). Here Jencks attempts to demonstrate, based on his reanalysis of a variety of secondary data, that the process of schooling has little effect upon the way in which income is distributed in the society. Considering the variety of factors that might contribute to differences in occupational statuses of males, Jencks concludes that, at the most, such factors as amount of schooling, family background and test scores, account for only about one half. The other 50 percent of the variation must be accounted for by factors other than those commonly considered to be most important or perhaps those for which we have no measures. The "other factors" are merely guessed at by Jencks although he suggests that personality variables and luck may play a part in determining occupational status. (Here again the editors of the *Harvard Educational Review* published symposium papers responding to Jencks' study, in the February 1973 issue.)

These criticisms of education with their bleak prognostications for the economic and social advancement of low status individuals through schooling, the traditional American route, were picked up and spread through the popular media. Jensen and Jencks received front page coverage and had long articles devoted to their views in *The New York Times*, Shockley has recently been interviewed by William Buckley on television (after Buckley disowned his views in the *National Review*), and Herrnstein's article was originally published in *Atlantic*, not a professional journal. (Just a year before Jensen's *Harvard Educational Review* article the published version of a symposium of a special committee formed by the Scientists' Institute for Public Information on biological and social aspects of race appeared. It assessed the state of scientific knowledge about race and challenged the persistent myths of the biological superiority or inferiority of certain people [*Science and the Concept of Race*, N.Y.: Columbia University Press, 1968]. The popular media gave no play to this symposium, despite the fact that some of the contributors were Margaret Mead, Loren Eiseley, and Theodosius Dobzhansky.)

As an ERIC Clearinghouse, ERIC/IRCD has put forth a concerted effort to capture and disseminate the research and informed opinion on these issues. The Clearinghouse has been monitoring papers and journal articles on genetics and ethnicity and schooling for input into *RIE* from such sources as the American Educational Research Association, The Association of Black Psychologists, and so forth. Many individuals have sent papers, conference proceedings and research reports, not least of whom is Arthur Jensen, who is a prolific contributor to the ERIC system. One such set of documents is the report of hearings before the Senate Select Committee on Equal Educational Opportunity (the Mondale Committee), which is a rich source of information on these and related issues:

ED 045 795	ED 058 356
054 273	059 308
054 274	059 311
054 280	059 312
055 131	059 313
057 135	059 319
057 159	060 147
057 160	061 359
058 339	061 390
058 343	062 471
058 354	064 437
058 355	065 653

The staff has developed a list of descriptors for searchers of *RIE* and *CIE* interested in these issues. Useful terms include:

Abstract Reasoning	Intelligence Factors
Academic Ability	Intelligence Quotient
Academic Achievement	Intelligence Tests
Associative Learning	Learning Processes
Concept Formation	Lower Class
Culture Free Tests	Minority Groups
Educational Opportunities	Problem Solving
Environmental Influence	Race
Equal Education	Racial Characteristics
Ethnic Groups	Racial Differences
Genetics	Racial Factors
Heredity	Racism
Intelligence	Socioeconomic Status
Intelligence Differences	

Staff members have attended a number of professional meetings and symposiums, collecting new information and pointing to existing sources to help conferees in their work. Dr. Edmund W. Gordon, Director of the Clearinghouse, has contributed papers at a number of these conferences. (Of interest here is Dr. Gordon's review of the important literature on "An Affluent Society's Excuses for Inequality: Developmental, Economic, and Educational," *American Journal of Orthopsychiatry*, January 1974.)

The Clearinghouse has also devoted issues of the *IRCD Bulletin*, a serial publication distributed to a large mailing list, to these topics. The theme of one issue (ED 037 519) was "Education, Ethnicity, Genetics, and Intelligence." It contains a number of articles by educators, psychologists, and anthropologists, among others, as well as position statements of a number of scientific organizations. (It's good to know that the *Bulletin* is read by those it addresses: Jensen in his recent writing has directly answered the arguments raised in the *Bulletin*.) For another issue of the *Bulletin* (ED 075 563) the Clearinghouse edited the transcripts of a symposium of critical reactions to Jencks' *Inequality*. A social policy expert, an educational historian, a psychologist, and a sociologist were the participants.

An ERIC Clearinghouse has a number of identities: it is a member of a network of clearinghouses devoted to the identification, collection, selection, and processing of high quality educational information for input into the ERIC data base; it is an information analysis and user services center; and it acts as a link to professional organizations and other special groups. When there is a need for information on a current critical issue, the educational public can be sure that an ERIC Clearinghouse is a well-functioning synapse for the continual flow of information.

THE NEW ERIC PROCESSING MANUAL

by Murray L. Howder, Acquisitions Librarian
ERIC Processing and Reference Facility

The new *ERIC Processing Manual* (issued in July) provides rules and guidelines, with many examples, for the acquisition, selection, and technical processing of documents and journal articles by the various components of the ERIC network. As the "bible" for ERIC operations, the manual prescribes the implementation of ERIC policies for the collection, analysis, and dissemination of education literature.

The new manual represents the first complete revision of its predecessor, the *ERIC Operating Manual*. Following a general introduction to the ERIC system, it contains nine main

divisions, including entirely new sections for the acquisition and the selection of materials to be included in the ERIC data base. The remaining sections have been extensively re-written. They treat handling and shipping, descriptive cataloging, abstracting/annotating, indexing, vocabulary development and maintenance, and journal article processing. Seven substantive appendixes and a subject index enhance the reference value of the manual.

In addition to being a basic training text for new document processors, the manual is an essential coordinative tool in ensuring consistency of input among the decentralized ERIC components. At the same time, it provides an understanding of the construction of the ERIC data base, which is vital to searchers and retrievers.

To meet this need, the manual has been accessioned as IR 000 726 and will be announced in the October issue of *Research in Education* (RIE). Copies can be ordered from the ERIC Document Reproduction Service (EDRS) in either microfiche at \$.90 or in hard copy at \$25.80.

The new *ERIC Processing Manual* answers in detail most questions about ERIC operations. Everyone involved regularly in building or in exploiting the ERIC data base should have a copy handy.

INTERACTIONS AMONG EDUCATIONAL INFORMATION SYSTEMS

by Barbara Booth, Acquisitions Librarian
ERIC Clearinghouse for Junior Colleges

Information is a commodity that is packaged and delivered like any other goods. The ways in which information is packaged have been determined by the economics of the market place, including production costs and consumer demand. A number of forms for the packaging of information have proven to be economically viable and have become standardized, including the separately published book and the collectively published journal article—forms with which we are all familiar. In the organization of information for delivery, these forms have been treated as separate and distinct literatures. Different kinds of indexes have been developed to provide bibliographical access and subject retrieval for each type. In education, where ERIC's use of microfiche has made the indexing and dissemination of the report literature economically feasible, the division of the available literatures into separate information systems is particularly marked.

From the point of view of a large university or professional education library in which educational information is collected in all of its forms, the various types of literature and their corresponding indexes constitute *parallel information systems*.

In the sense that each system covers the full range of educational topics, they may be seen by the information seeker as *alternative systems* which interact and compete with each other.

EDUCATIONAL INFORMATION SYSTEMS

Characteristics of the forms of educational literature and their corresponding delivery systems are described below. They follow a rough chronological sequence, latest first, based on their emergence as organized systems. Within the sequence, production costs necessitate an increasingly larger market for publications in each system. Consequently the forms of literature reveal an ascending process of synthesis and interpretation in the treatment of information, from the most specific to a highly generalized level of detail and applicability.

REPORT LITERATURE

The most recently organized type of education literature, familiar to all readers of *The ERIC Report*. Bibliographic control and dissemination of the literature has been provided by ERIC since 1966. Beginning with reports of federally

funded research and demonstration projects, coverage has been extended to include all types of reports produced by local educational agencies and other unpublished materials for which no bibliographical control previously existed (hence, "fugitive"). The system is designed to accommodate a large volume of documents of highly specialized or local interest through inexpensive microfiche dissemination and on-demand paper reproduction. Input to the system is selective: of the countless thousands of such documents produced each year, only 12,000-14,000 are accepted into the system.

Bibliographic access is provided through *Research in Education*.

Subject retrieval is provided through a highly specific vocabulary system, controlled through the *ERIC Thesaurus of Descriptors*.

DISSERTATIONS

Specialized research studies and theoretical treatises which serve as a vehicle for scholarly certification. Bibliographic control and dissemination of the literature has been provided by University Microfilms since 1938. The system is designed to accommodate a large volume of materials through inexpensive on-demand microfilm or paper reproduction. More than 5,000 doctoral dissertations in education were produced in 1970, and over 260 institutions participate in the program.

Bibliographic access is provided through *Dissertation Abstracts International*.

Subject retrieval is provided through a KeyWord in Context (KWIC) indexing system.

PERIODICAL LITERATURE

Collective and serial publication of brief writings of general or specialized interest. Synthesis and generalization of information begins in this form; articles may differ functionally from books only as a matter of scale. Length determines the treatment given to topics of various scopes: detailed treatment of narrow topics, such as reports of experiments, and summary treatment of broad topics. Not each article but all articles together must appeal to a wide enough audience to permit continuing publication of a periodical. Commercially published (profit-making) periodicals must appeal to a broader audience than those sponsored by professional organizations. A prepayment (subscription) economic base is necessary for dissemination in this form.

Bibliographic access has been provided on a selective basis (200 periodicals) through *Education Index* since 1929, with

subject retrieval through a pre-coordinate controlled vocabulary.

Bibliographic access has been provided on a comprehensive basis (700 periodicals) through ERIC's *Current Index to Journals in Education* since 1969, with subject retrieval through ERIC descriptors. Approximately 20,000 titles are indexed in *CJ/E* each year.

These access and retrieval systems are directly competitive.

BOOKS, SCHOLARLY AND PROFESSIONAL MONOGRAPHS ON SINGLE TOPICS

Lengthy treatments of broad topics which provide synthesis and interpretation of educational information. Lag time in the discussion of new topics increases in this form. The expense of separate publication and dissemination necessitates wide audience appeal, particularly in the case of commercial publishers. Twelve to fifteen hundred new titles and editions are published each year.

Bibliographic access is provided through library card catalogs and published bibliographies.

Subject retrieval, where large book collections exist, is usually provided through subject headings as established in the *Subject Headings Used in the Dictionary Catalogs of the Library of Congress*, a pre-coordinate indexing system generally referred to as the "LC list."

ENCYCLOPEDIA COMPILATIONS

Information in this form is presented at the highest level of synthesis and interpretation. Included are general and specialized manuals, handbooks, and encyclopedias. Lag time in the handling of new topics and the incorporation of new information is very great. No separate access and retrieval system exists for such works; in so far as they review and summarize the current body of literature for a given topic, they serve in themselves as compact information delivery systems. 15-25 such titles are published each year.

There is some correspondence between the chronological development of types of educational literature, the establishment of bibliographical access and retrieval systems for each type, the size of the potential audience each is designed to address, and the number of items/publications which fall into each category. As has been shown, this correspondence is based on the ways in which educational information is generated, synthesized, and interpreted, and on economic considerations in information dissemination. Figure 1 presents a graphic representation of these relationships.

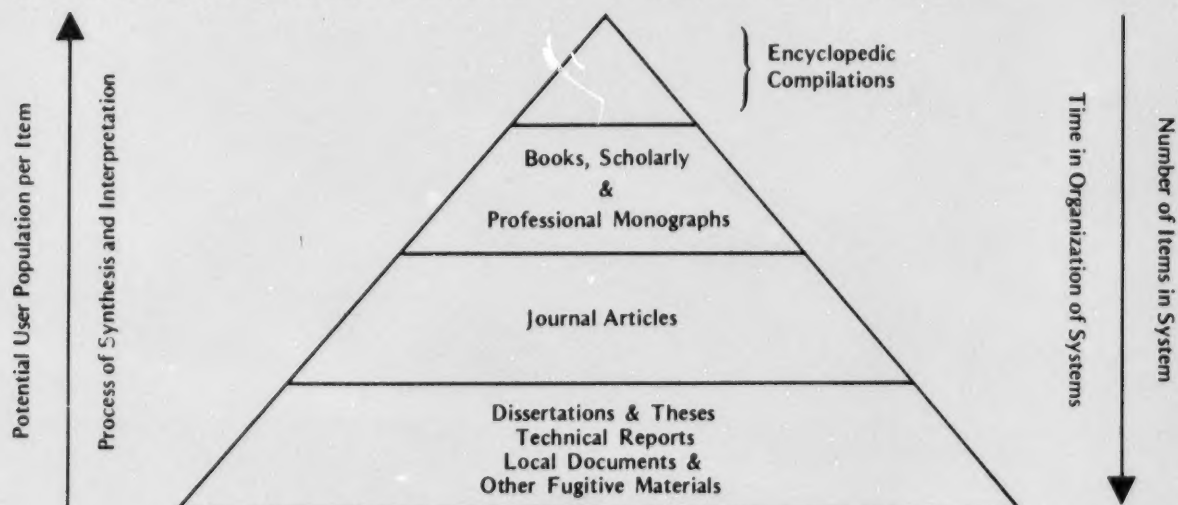


Figure 1
Hierarchical Relationships Among Educational Literatures

INTERACTIONS AMONG EDUCATIONAL INFORMATION SYSTEMS

Interactions among educational information systems are manifested in the *decision process* followed by the information user or for the user by a librarian familiar with all systems, in the development of *search strategy* for the retrieval of information. Search strategy involves the choice of which information systems to search, or in what sequence several systems should be searched, to satisfy a particular information need. Once a system has been chosen, search strategy involves the choice of subject terms to be employed in the search for maximum retrieval of information. Where no subject terms existing in a given system precisely match the user's topic, strategy involves the assignment of priorities among possible subject terms, considering the total number of citations which will be listed under each term and the ratio of relevant to irrelevant citations included in each listing. Such a choice is most often necessary for a multi-faceted topic such as "methods for teaching mathematical concepts to black preschool children." Should one search under TEACHING METHODS, or PRESCHOOL EDUCATION, or MATHEMATICS, or NEGRO CHILDREN? Any of these approaches may be taken; all will require the scanning of a great many irrelevant citations in order to find the few relevant ones.

Search strategy always follows a principle of least effort.

In the analysis of decision processes which follows, *Research in Education*, as bibliographic access and retrieval system for the ERIC Document Collection, is employed as a focus for the discussion of interaction among systems. *RIE* best illustrates the interplay of factors in the decision process because of its unique advantages and disadvantages as a source of educational information. It is the only system in which the contents of the materials are fully abstracted, yet the microfiche format of the collection makes it less desirable from the point of view of the user. In this discussion, the immediate availability of a complete microfiche collection is assumed; where sets of *RIE* exist without corresponding microfiche collections, considerations of cost and delay greatly alter the decision process.

Four decision factors are involved in the user's choice of information systems:

1. Type of information needed.
2. Volume of information available.
3. Volume of information and level of generalization needed.
4. Ease of subject access.

TYPE OF INFORMATION NEEDED

The correspondence between scope and treatment of topic, potential size of audience, and form of publication has been previously mentioned. Due to the functions of the various types of literature, some kinds of information only come in certain packages. For a person seeking evaluation studies of volunteer teachers aide programs, *RIE* will be the obvious choice. Such studies are by their nature local school or school district reports since that is the context in which the programs occur. Dissertations are another possibility for such topics, but will be rejected as a first choice because the studies must be ordered. Many other types of materials, such as planning documents, program descriptions and curriculum guides also

fall into the category of documents produced by local agencies and institutions with limited distribution at the source, for which *RIE* provides the only access and availability. On the other hand, the document collection cannot compete with books in the satisfaction of such information needs as an historical overview of the development of the vocational education movement or philosophical theories of education. Studies in the psychology of learning, or ideas for art projects, will be most easily obtainable in the journal literature. Each information system has its unique materials.

VOLUME OF INFORMATION AVAILABLE

Where information is readily available in all information systems, the consideration of physical format, or even library circulation periods, will weigh heavily in the user's decision. Books and articles will be preferred because of their portability and other conveniences to the user. Where information is scanty, however, physical characteristics will recede in importance. Particularly with new topics or concepts in which timeliness is a factor, such as the voucher plan or performance contracting a few years ago, *RIE* may have no competitors due to the scarcity of information. At this point the question of volume of information available blends into that of types of material, since the first written materials on a topic are likely to be generated by research centers or demonstration projects through the report literature.

VOLUME AND LEVEL OF GENERALIZATION NEEDED

If all available information at all levels of detail is required by the user, all information systems will be equal. When a comprehensive literature search is undertaken, no decision is required except in the matter of a sequence of the search. If, however, only *some* information is required, particularly more general information, *RIE* will be rejected on the basis of user convenience. The other systems will be considered as the decision process continues, according to the specific level of generalization needed and in view of the other decision factors.

EASE OF SUBJECT ACCESS

Other decision factors break down if access to existing information is inhibited by the particular subject retrieval system. For instance, the large number of books on behavioral objectives are virtually unobtainable because the Library of Congress has established no subject heading for this topic. Books on behavioral objectives are entered by the Library of Congress under 1) BEHAVIORISM (PSYCHOLOGY), where they are intermixed with the operant conditioning literature and 2) EDUCATION-AIMS AND OBJECTIVES, where they are intermixed with the philosophy of education literature. Double entry in this case represents an attempt to approach the concept of behavioral objectives from two directions, rather than establish a new and direct entry. The user will not be able to discern this logic. Similarly a KeyWord in Context retrieval system, in which each title is entered alphabetically in the index under every substantive word in the title, presents another inhibiting access problem. If you are looking for information on teacher education, do you plow through all the hundreds of entries per volume under TEACHER, or do you plow through the hundreds of entries under EDUCATION?

RIE and *CIJE* frequently offer advantages in ease of subject

access which override other decision factors, because retrieval is based on the largest, most specific vocabulary system in education. Likelihood of direct access to particular information is greatest in such a system. Other information systems may be eliminated in the decision process for this reason, but consideration of format, volume of information needed and level of detail required will then reappear in the choice between *RIE* and *CIE*.

For all their specificity, most ERIC descriptors represent single concepts—things. Where the information sought concerns some aspect of process or function of a thing, a pre-coordinate indexing system in which a subject is divisible by its aspects is a more effective retrieval mechanism. As pre-coordinate systems, both *Education Index* and *Library of Congress* put together complex topics by such division.

For example:

UNIVERSITIES AND COLLEGES—ADMISSION
UNIVERSITIES AND COLLEGES—ADMINISTRATION
UNIVERSITIES AND COLLEGES—FINANCE

ERIC represents a post-coordinate indexing system. Ostensibly, the user must search either all entries under COLLEGES or all entries under EDUCATIONAL FINANCE (never both, for there should be complete redundancy) for materials on the financing of colleges. This is actually the case in most instances. However, many descriptors representing complex topics have found their way into the system, COLLEGE ADMISSIONS and COLLEGE ADMINISTRATION being straightforward examples. More ambitious attempts at complex construction are exemplified by BOARD OF EDUCATION POLICY and BOARD OF EDUCATION ROLE, and the many "relationship" descriptors such as PARENT SCHOOL RELATIONSHIP and BOARD ADMINISTRATOR RELATIONSHIP.

Given the advantages and disadvantages of the various subject indexing systems, ease of subject access between alternative information systems depends on the specific subject sought in each case. In the decision process, ease of subject access will interplay with other factors. A person seeking a general book on performance based teacher education will accept a few recent articles listed directly under that heading in *CIE*, rather than search through everything under TEACHERS—TRAINING OF in a library card catalog. Similarly, a person seeking material on counseling the disadvantaged may put aside *RIE*, *CIE*, and the card catalog in favor of *Education Index*, which indexes less than half the number of periodicals than *CIE* but which allows direct entry under CULTURALLY DEPRIVED—COUNSELING. If a com-

prehensive literature search is unavoidable, the user will plod wearily onward, but he will begin with *Education Index* on the principle of Easiest First.*

A COMPREHENSIVE EDUCATIONAL INFORMATION SYSTEM

The efficient retrieval of educational information requires the design of a search strategy based on a complicated decision process. There is no question but that these decisions are often poorly made by the ordinary information seeker. The decision process requires continuous practice and experience; it is a highly developed skill which forms the basis of reference librarianship.

The factors outlined above constitute the criteria by which choices are made in information retrieval. Such choices are necessary only because educational information has not been viewed in its entirety. Instead, librarians and others involved in the organization of information have focused on certain literary forms in which information is presented, and have developed separate bibliographical access and retrieval systems which seem to be best suited to each form. This need not be the case: there is nothing in the nature of ideas or facts which inevitably determines the ways in which they are packaged and presented to the world. The book and the journal article are mere conventions; information might as well be disseminated in a massive card file, one idea or fact per card, or as a continuous chronicle. For economic reasons, the availability of a variety of forms for information packaging is necessary and useful. It allows flexibility to the information producer or compiler, so that many variations in the scope and treatment of information are possible. The difficulty lies in the fact that bibliographical form has been singled out as the organizational criterion.

The existence of a number of self-contained and topically parallel information systems in education, each with inherent constraints and limitations, presents serious problems for the individual information user and may inhibit the effective development and utilization of knowledge on a larger scale. *The ERIC Report* (Number 4) contained an announcement that NIE has asked for proposals to conduct a study that will specify requirements for a comprehensive educational information system. The study will involve an analysis of the content and accessibility of existing information resources, an analysis of the market for educational information, and the design of an integrated information system. It will be interesting to see how the problems which have been discussed here might be resolved in such a system.

*Someone ought to do a study correlating tolerance for delayed gratification and schedules of reinforcement in such searches. Given various levels of tolerance, what frequency of relevant citations must be found to keep the searcher from throwing up his hands in despair and changing his dissertation topic?

ALASKAN EDUCATION— EXTREMELY ISOLATED BUT DISSEMINATION MINDED

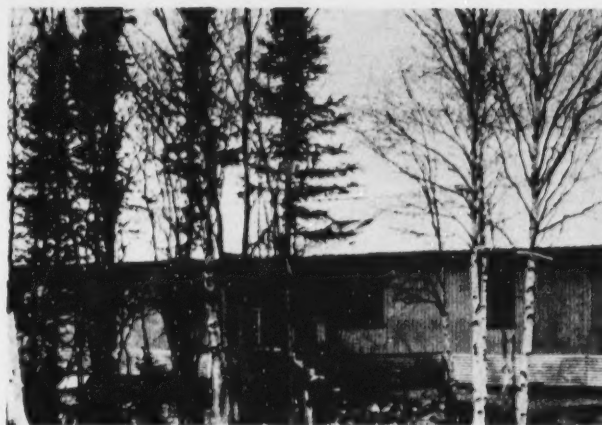
by EVERETT D. EDINGTON, DIRECTOR
ERIC Clearinghouse for Rural Education and Small Schools

The task of developing an effective educational information dissemination program for Alaska, the largest state in the nation, seems almost impossible because of geographical factors that result in small population centers separated by vast distances. Many schools can be reached only by airplane, dog sled or snowmobile. A few can be reached through water ways—when they are not frozen. Some of the schools are extremely small, staffed by one or two teachers who are responsible for the physical facilities as well as the education of the children. Few of the towns have secondary schools so students going on to high school must leave their homes and communities to attend boarding schools elsewhere. The isolation and distances make it very important that the outlying schools have the information so vitally needed for curricular changes and decision making.

A few determined people in the educational information business have dedicated themselves to developing a dissemination program for the schools in the state. Taking the leadership in this difficult task are Marilou Madden, of the State Department of Education, and Richard Engle, the state librarian.

The personnel of the Bureau of Vocational Education in the State Department of Education have cooperated in this venture. This agency changed the format of its Vocational Information for Education and Work (VIEW) material so that it could be placed on the same type of microfiche as are ERIC documents. This practice has enabled the Alaskan microfiche user to use the same equipment for both VIEW and ERIC material. (Most, VIEW material). Further, Bureau of Vocational Education has placed a microfiche reader in each secondary school in the state to ensure the utilization of VIEW material. The readers also provide ready access to the ERIC Collection.

The State Department of Education, in cooperation with the state library, has developed a system for distributing ERIC microfiche to those schools with readers. A request is sent, usually by letter, to the State Department of Education stating what problem the particular school is attempting to solve. Personnel from the research staff of the department develop a search strategy using the ERIC *Thesaurus*. This search request is then fed into the computer, and the ED numbers printed out. Next, a staff member selects from issues of *Research in Education* the most important abstracts—based upon the original request. These abstracts are sent to the user, who determines which complete documents are needed. The request for the microfiche is returned to the State Department of Education, where it is passed on to the State Library so the duplicate microfiche can be made and sent to the user. The microfiche can then be kept in the school's permanent professional library. Thus a file of information based upon the



High school building at Nulato, Alaska.

needs of the particular school can be built.

This system may sound complicated, but the lack of information expertise now common in a large majority of Alaska's school districts makes the need for quality control by State Department of Education personnel in helping select the documents essential. Schools with more sophisticated library staffs and with access to an ERIC collection, such as the Juneau schools, go directly to the state library with their requests.

After a recent trip to Alaska, where he visited in some of the schools and with personnel in the State Department of Education, as well as with the officer of the State-Operated Schools, the Director of the ERIC Clearinghouse for Rural Education and Small Schools made the following recommendations to the State Department of Education.

1. That a coordinating body be established within the State of Alaska to work out a complete dissemination system for the schools. This body would include persons from the State Department of Education, the State Library, the State-Operated Schools, and the Bureau of Indian Affairs (BIA), as well as from the University of Alaska. Hopefully, an ex officio, nonvoting person from the ERIC system, either from Central ERIC or from an appropriate clearinghouse, could also be a member of this coordinating body.
2. That an extensive training system be established for in-service programs in using the ERIC system. This in-service program could first be conducted for individuals from the State Library, the State Department of Education, the State-Operated Schools, the

University of Alaska, and, if possible, the BIA. A second-level training program should then be provided for area superintendents and representatives from the independent school districts. From these two groups of trained people, the state could then develop programs for training persons in the individual schools to use the ERIC system. During the initial training phase, the state probably should have help from people in the ERIC system—possibly people from Central ERIC, the Clearinghouse on Rural Education and Small Schools, and the Clearinghouse on Information Sciences.

3. That a small ERIC microfiche reader be placed in all schools within the state. The secondary schools already have readers, but similar equipment should also be placed in the elementary schools. It is extremely important that the isolated bush schools, with few teachers and poor communication links with the outside world, have adequate information.

4. That *Research in Education (RIE)* and *Current Index to Journals in Education* be provided on a continuous basis to each site with a microfiche reader. If this practice is not feasible, then it is recommended that each area superintendent of the State-Operated School System receive copies to carry with him when he visits the schools within his area. In this way, all schools can keep abreast of current information. If each school received RIE, some of the

work personnel in the State Department of Education must now do, in selecting material based upon requests, could be eliminated.

5. That the state provide additional resources to develop and operate the dissemination system to the schools in the State of Alaska.

6. That investigations be made of possible cooperation between ERIC and the State of Alaska to disseminate, through the satellite program, ERIC information to isolated schools. Such cooperation may be possible now in those areas of career education and preschool education, for which the satellite will be operating.

It can be done. Educational information can be disseminated to even the most isolated schools. That the information is desired and needed is beyond doubt. One need only witness, during a microfiche reader demonstration of ERIC materials, the visible excitement of teachers from isolated schools as they realize the types of information at their fingertips. Or discuss their ERIC system with an area superintendent of the State-Operated School System. One such superintendent, who saw his job as that of linker and change agent, readily agreed that access to the ERIC materials would make him a much more valuable resource for his schools.

The State of Alaska is to be commended for its efforts to make information available in order to facilitate change in even the most isolated districts in the nation.



The gymnasium at the Nulato School in Nulato, Alaska; the Yukon River in the background.

ERIC/RCS SPEECH COMMUNICATION MODULE

By KEITH COOPER, Administrative Assistant
ERIC Clearinghouse on Reading
and Communication Skills

The Speech Communication Module of the ERIC Clearinghouse on Reading and Communication Skills, while a module, fulfills many of the functions of a full clearinghouse.

The Module, administered by the Speech Communication Association in New York, is a division of ERIC/RCS, administered by the National Council of Teachers of English in Urbana, Illinois. It is responsible for processing educationally relevant information in all aspects of speech communication—forensics, public address, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, speech science, theatre, and instructional methodology and development in these areas.

Dr. Bernard O'Donnell, director of ERIC/RCS and Sister Rosemary Winkeljohann, associate director, supervise all aspects of the Clearinghouse, while Dr. Patrick Kennicott and Dr. Barbara Lieb-Brilhart, co-directors of the Module, supervise the activities of the Speech Communication Module.

It is responsible for processing about 650 documents this year into the ERIC system for listing in *Research in Education*. Sixty different journals are reviewed for listings in *Current Index to Journals in Education*. The Module takes responsibility for sending documents in the speech area to evaluators, getting permission for ERIC accession, and making sure a reproducible copy is available.

The Speech Communication Module also provides a full complement of user services. These include bibliographies, brochures about ERIC, displays and workshops at conventions in the Speech Communication area.

Among the most popular of currently offered services is the collection of materials on the current high school debate topic (which is selected each year by the National High School Debate Association). The Module provides a free bibliography, 966 pages of resources on microfiche and the second annual ERIC First Analysis (published in cooperation with the Speech Communication Association and the National University Extension Association).

This material is available to debaters and their coaches, universities holding debate workshops, congressmen who make the material available to their constituents, and others interested in this year's debate topic.

Extensive treatment of the annual debate topic began with the 1973-74 topic. A First Analysis, bibliography and microfiche resources were prepared and proved so popular the Module decided to continue the program for 1974-75. Popularity of the resources has increased this year, in spite of the rise in prices for the materials.

With the new contract year which began in June, the Speech Communication Module was restructured in an effort to provide more efficient service to the parent clearinghouse (ERIC/RCS) and users of Module services.

The Module now has two co-directors, one who is in charge of administration of the Module, the other who handles product development; a research associate who develops short reports, Thesaurus modifications and handles C/E input as well as other day-to-day activities, answers user requests, processes documents and develops promotional materials. All user requests are filled the same week they are received.

During the coming year the Module will add several products to its list of available resources. Among these are extensive state-of-the-art papers, short papers in the form of journal articles, short and extensive bibliographies, and Projects Monday Morning.

Short bibliographies due for release soon concern listening instruction, costuming, stage lighting, voice science, career communication and cable television. Other subjects are planning for completion in the spring.

The two extensive bibliographies planned for release this year are on print and non-print resources for elementary and secondary school speech communication instruction.

Journal articles and Projects Monday Morning are planned in various areas of speech communication.

Although the Module staff is limited, it tries to answer requests from users as completely as possible. In cases where it does not have the facility or information to answer a specific request, the user is referred to an agency which can answer the request.

For more information about the Speech Communication Module write to the Speech Communication Association, Statler Hilton Hotel, New York City 10001.



WASHINGTON REPORT

NEW CONTRACTOR FOR EDRS

After several months of negotiation, the Central ERIC staff secured a contract for operation of the ERIC Document Reproduction Service (EDRS) on June 15. The new contractor is Computer Microfilm International Corporation (CMIC), located in Arlington, Virginia, and the contractual terms are a one-year contract with the government having two options to renew.

CMIC entered the contract with a considerable backlog of orders having been built up during the negotiation phase. Although original plans and expectations were that deliveries to standing order customers would be "on schedule" by the end of September, unforeseen production problems caused this date to be changed to the end of October. Also, CMIC has been filling on-demand orders for microfiche and paper copies of RIE documents and expected to eliminate a backlog of such orders by October 15. Thus far, ERIC managers have reported a marked increase in quality control in all aspects of the EDRS operation.

Mr. Walt Steele is the director of CMIC and he has expressed an interest in making arrangements for various kinds of special microfiche requirements which any clearinghouse, professional association, or any other group may be interested in. Ms. Lila Patterson heads up the customer services operation and is available to discuss any service problems or requirements on the part of standing order customers or those who place on-demand orders with EDRS.

The changeover of EDRS contractors has, of course, created confusion for some people—particularly the occasional EDRS user. Therefore, it is essential that all ERIC clearinghouses and ERIC standing order customers acquire an adequate supply of the new EDRS order forms so as to be able to distribute them to all potential customers.

For those who have not yet obtained the new price structure for EDRS, see below:

ERIC DOCUMENT REPRODUCTION SERVICE

PRICE LIST

MICROFICHE (MF)		PAPER COPY (HC)	
Number	Price	Number	Price
1 to 5	\$.75	1 to 25	\$1.50
6	.90	26 to 50	1.85
7	1.05	51 to 75	3.15
8	1.20	76 to 100	4.20
Each additional microfiche	.15	Each additional 25 pages	1.20
Postage: \$.18 for up to 60 microfiche \$.08 for each additional 60 fiche		Postage: \$.18 for first 60 pages \$.08 for each additional 60 pages	

STANDING ORDERS

Subscription orders of microfiche copies of all ERIC reports announced in each issue of *Research in Education* average \$116 per month at the rate of 7.8¢ per microfiche. Postage extra.

NIE REQUIREMENTS STUDY TO EXPAND EXISTING EDUCATIONAL INFORMATION SYSTEM

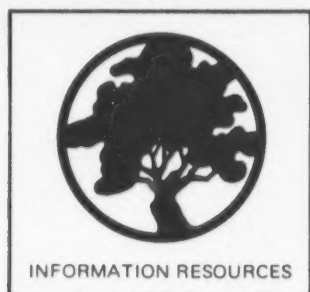
The System Development Corporation, Santa Monica, California, was the successful bidder for an NIE contract to develop requirements for a comprehensive educational information system. The contract was awarded in June 1974 and is to run for a period of 18 months, ending December 1975.

Sam Rosenfeld, NIE's Deputy Director of the Information Systems and Communications Division, has stated that the contractual effort is expected to include an analysis of existing information resources and services together with a market analysis of needs and demands for information. ERIC is expected to remain as a cornerstone of any future improvement in the delivery of education information. Ultimately, the

results of the requirements project will build upon the existing information structure, modify or add to it where necessary, and create a better integrated and more comprehensive system.

Key members of the SDC contract team are Mr. Karl M. Pearson, Jr., project manager, along with Dr. Carlos Cuadra, Ms. Ann Luke, Ms. Judy Wanger, Dr. Paul Hood, and Dr. Colin Mick. Some of the people associated with ERIC, educational librarians, or those considered to be either users or potential users of ERIC will be contacted by SDC survey team members to fill out questionnaires or to become involved with in-depth interviews. NIE earnestly solicits the cooperation of all individuals so contacted in the hope that they will provide data and background for the ultimate construction of a more effective and more universally helpful information system in the field of education.

NEWS FROM THE CLEARINGHOUSES



TRAINING EDUCATORS TO USE ERIC

In recent months, the staff of the new ERIC Clearinghouse on Information Resources at Stanford University has become increasingly aware of the need to train educators to use ERIC.

This awareness has come about partly because of the Clearinghouse's close relationship with the library and information science community, and partly, we believe, because educators are themselves becoming more aware of ERIC and its potential for helping them acquire useful information.

In beginning to assume partial responsibility for teaching persons how to use the system, the Clearinghouse is evaluating existing training materials, and combining them into various programs and formats for testing at small workshops and seminars geared to our specialized clientele.

Examples of the materials we are using include the three excellent slide-tapes produced by the ERIC Clearinghouse for Social Studies/Social Science Education, and the module, "The Retrieval of Information Using Special Sources," from the Far West Laboratory for Educational Research and Development.

Dr. James Brown, the Clearinghouse's associate director in charge of professional relations, has been in close contact with library and media groups, colleges and universities, and other ERIC trainers, examining various ways to make these and other tools most useful to the educational community.

The overall purposes of the Clearinghouse Field Training Program (an official sounding name, but actually a very flexible project) include:

A. To ascertain specific training needs of various types of ERIC users in the field.

B. To test the effectiveness of various elements of prototype training systems which may be capable of meeting needs of different types of ERIC users (both individual and group).

C. To critique and to develop means of publicizing the availability and utility of media resources applicable to the tasks of training trainers and users of ERIC services.

D. To ascertain and define needs for (and characteristics of) other resources that may be required to implement fully the training program(s) that are developed (including such possible items as audio tapes, video tapes, visualized print materials, and others).

The first hands-on experience with the program occurred at the end of August, when Northern California ERIC Standing Order Microfiche Users were invited to the Clearinghouse for a one-day conference. The conference was organized to help Clearinghouse personnel ascertain the training needs of standing order users, to test the effectiveness of the Far West module and the ERIC/ChESS slide-tapes, to critique and publicize availability of various training resources, to establish communication between Clearinghouse staff members and local standing order customers, to provide information and activities explaining how ERIC works at the Clearinghouse level, and to expose participants to computerized searching of the ERIC file.

Personnel from the Stanford Libraries and from the San Mateo County Educational Resources Center were invited to participate and contribute to the program.

Participants were mailed attitude and knowledge pre-tests before the conference, and follow-up tests also were administered.

A second expanded conference was held in October in Eugene, Oregon, in connection with the Oregon Educational Media Convention. This conference helped Clearinghouse personnel identify and define special and common problems and needs of several different types of field users of ERIC, and of those whose work it is to provide interface training and/or information about the system.

The conference tested alternative plans to systematize: 1) the training of trainers who seek to improve their ability to use the ERIC system and 2) the training of individuals who seek to develop such proficiency on an independent study basis.

Some 30 individuals were invited, including persons from the Offices of the State Librarian in Oregon and Washington, standing order customers, directors of school media programs on a state level, institutions providing training in librarianship and information science, and selected other organizations, such as Northwest Laboratory.

The Clearinghouse on Educational Management assisted with this conference.

What could happen now? A number of things. First, the Clearinghouse might develop a firm training plan for "trainers of trainers," complete with validated materials. Second, we might develop a similarly-firm training plan for independent study. Dr. Brown is exploring with San Jose State University and other institutions the possibility of offering college credit for this phase.

Third the Clearinghouse might get some media resources into final shape for distribution. Fourth, we might explore ways in which other ERIC centers may become involved in doing "training of trainers" work, making use of our materials. Fifth, we could explore ways in which other institutions of higher learning may become involved in offering credit for the training work we develop.

We hope that users and other Clearinghouses will offer their comments and suggestions on this Field Training Program.



CAPS GOES TO THE MOVIES

In an effort to familiarize as many potential community users as possible with ERIC—what it is, where our Center is, how ERIC can be of service to them in their work—the CAPS staff sought to create an audiovisual presentation which would respond to these needs. To this end, several staff members attended an audiovisual course offered by the University of Michigan School of Education and learned how to operate video equipment. They settled on a "story" line, recruited "stars", and set to work filming and taping right in our Center, with CAPS staff as presenters. The film instructs those who come to ERIC/CAPS in how to use our facilities and informs those who do not know about ERIC of its potential usefulness to them. The presentation will shortly be aired on local public access TV, where members of the community will learn about a whole network of educational resources heretofore unknown to many of them. The CAPS Center hopes to develop other outlets for the production, such as university orientation programs for graduate students.

Videotape as a medium, especially in conjunction with educational television, can be instrumental in reaching increased audiences without an increase in staff. It can reach out into the community or add a new dimension to classroom, group, and library activities. Many documents regarding the use of videotape have been added to the ERIC system in the last few months:

■ A bulletin published by the National Center for Educational Statistics (DHEW/OE) provides data on the availability of television and video equipment in a nationally representative sample of public schools. (ED 084 776)

■ Using video equipment to take advantage of already produced programs is James E. Duane's solution to the complexities of producing programs. He advocates close cooperation between schools and local educational television stations. (ED 084 813)

■ Donna Miller (ED 087 466) and Alistair J. Wilson (ED 084 769) present guidelines for program production. John F. LeBaron outlines how task forces of children can use video and television as vehicles for community-based environmental learning. (ED 083 828)

■ Charles Clift discusses non-broadcast uses and techniques of videotape, with guidelines for utilization. His focus is on providing a structural stimulus for specific viewer responses, rather than on video as a means of exposition. (ED 085 785)

■ Donald Hess describes a K-12 instructional media project in which educational television programs and 16mm films were transferred to videotape cassettes to enrich curriculum and support library and educational television services. (ED 087 376)

■ Further analysis of the application of video recording to information retrieval appears in a paper by I. Turner. He considers techniques, cost, and problems of storing video signals; methods of indexing video information; and controlling video systems. (ED 081 446)

The potentials of videotape and television are alluring. Not only is it an instructional combination, it is an event. It reinvolves people. Through their group effort in making this movie, the staff at the CAPS Center have become excited about ERIC all over again.



EVOLUTION OF A DIRECTORY

In 1968 the Clearinghouse on Educational Administration issued a new publication in response to requests for sources of information. *Organizations in Educational Administration: A Directory of Information Sources* was a small publication (the title was nearly as long as the directory). For each of 102 organizations across the United States, it listed service area, information-giving policy, scope of subject matter, and available publications. And it was free for the asking.

Now in its fourth edition, the directory has changed not only in size, appearance, and price (it costs \$3.50), but especially in content. In light of the current emphasis on user services, the Clearinghouse on Educational Management wants to share the history of this publication with others as an illustration of one effort to meet clients' needs.

Of course, the 1974 edition isn't totally different from the original publication. Many of the same types of organizations are represented, and the focus remains on guiding users to organizations having specific publications or other information in a specialized area. But the scope of that area has been enlarged and refined through successive editions.

Beginning with the second edition, the directory added a section on people to the one on organizations. The primary purpose of the personnel listings was, and still is, to help researchers find others who are doing research related to their own. Also in the directory since the second edition are three indexes whose usefulness cannot be overemphasized. Without its carefully prepared geographic and subject indexes, the publication would be an alphabetical summary of agencies and individuals, not a directory.

Several decisions and events affected both contents and

appearance of the third edition. First, because of amendments to clearinghouse responsibilities, the scope of the directory was altered to coincide with that of the renamed Clearinghouse on Educational Management. Specifically, ERIC/CEM acquired responsibility for educational facilities. Thus the 1971-72 edition covered research on facilities at all levels of education as well as such subjects as planning, finance, organization of instruction, staffing, and evaluation. That was when the title took its present form—*Directory of Organizations and Personnel in Educational Management*.

A second obvious change between the second and third editions was that the number of individuals listed more than tripled while the number of organizations remained fairly stable. What is noteworthy about this is that the trend continued in the fourth edition—not because of any arbitrary decision to deemphasize the organizational directory and push the personnel section, but because of continued reassessment of the goals and uses of the directory.

Another change was of a technical nature and had far-reaching effects. Namely, a new method of production was adopted. Through the use of a composer—a typewriter that has interchangeable typefaces and the ability to justify lines of typing—the directory suddenly evolved into a less bulky, more professional-looking publication. It was now 20 pages shorter, despite the fact the number of listings had more than doubled since the previous edition.

One other decision at that time should be mentioned. Originally, the directory had been scheduled for annual revision, but 1970 saw the wise administrative decision not to publish a third edition—yet. The compilers of the directory wanted future editions to be based on substantive changes in the information contained in the directory and on the needs of its users.

This philosophy has carried over into the most recent edition, as evidenced by the prefatory remark: "If change is an indication of progress, this new edition speaks well for the progression of research in educational management." New areas of interest among researchers are reflected in new index topics. For the first time women are considered relevant to educational management. Open schooling, futurism, systems building techniques, community education, and alternative schools have surfaced as "hot" topics.

One way to judge the worth of a product is through user response. Sales are the best (sometimes the only) means of getting this feedback. A directory—whether issued by a telephone company or a clearinghouse—is not the sort of thing that brings a flood of congratulatory wires. The only time you're likely to hear from a customer is when you've billed him twice or sent him a defective copy.

There are a few letters from conscientious recipients who call the directory "useful," "valuable," or even "a significant contribution to the field." And there's also the kind exemplified by a national educational organization officer who received a complimentary copy for his agency. He liked it so well he decided to buy one for himself. If people like it, they buy it. In 1971-72 over 1,000 copies of the *Directory of Organizations and Personnel in Educational Management* were sold. The 1974 edition has been available for two months, and so far 400 customers have bought it.

ERIC/CRESS

RURAL EDUCATION AND SMALL SCHOOLS

ERIC/CICE OFFERS COMPUTER SEARCH

The new ERIC Clearinghouse in Career Education at Northern Illinois University has arranged for Northern Illinois University to provide a computerized search of the total ERIC collection of *Research in Education* and *Current Index to Journals in Education* entries. In January of 1974 the RIC search program, developed by Ed Krahmer, was installed in the University's computer accompanied by the master set of ERIC tapes. Both *RIE* and *CIE* entries are updated quarterly.

The Clearinghouse has developed a set of directions and a request form which assist the user of the computer search to define his or her research question and to translate it into machine-readable logic. Briefly, the process requires that the user a) clearly define the research problem or question for which literature is being sought, b) become familiar with the ERIC *Thesaurus* and choose those descriptors which best capture the concepts inherent in the research question, and c) complete the Computer Search in Career Education Request form, with or without the assistance of the ERIC/CICE user services specialist, and mail it to Computer Search in Career Education, P. O. Box 100, Northern Illinois University, DeKalb, Illinois 60115.

Due to the substantial contribution of the university to this project, ERIC/CICE is able to offer this service to students and faculty on campus free of charge. A nominal fee of \$5.00 is charged for off-campus users.

The user of the computer search capability will receive two kinds of printed output: a) a list, by number only, of all the documents in the ERIC file which use the combination of descriptor terms selected for the search and b) a printout of 150 (75 for *RIE* and 75 for *CIE*) complete bibliographic references with abstracts which satisfy the search. The user may designate whether these 75 printouts should be the most recent 75 which have been added to the file, the oldest 75 in the file, or those which fall between given cutoff dates. Arrangements can also be made to receive a resume printout of all of the "hits" encountered in the search, even if these exceed 150.

Besides meeting the needs of individual inquirers, ERIC/CICE has also used this computer capability to develop bibliographies on topics which its present experience indicates to be of general interest in the fields of career education, vocational-technical education, and adult and continuing education. At this time five computer-generated bibliographies are available free of charge from ERIC/CICE. They are the following:

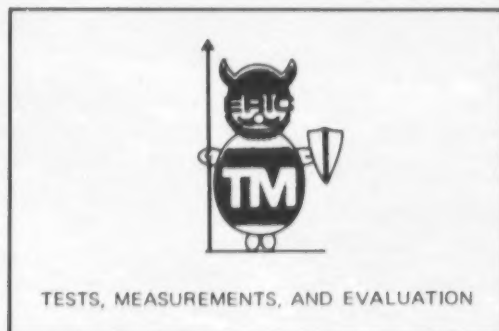
- IBS 1 General Reference Sources on Career Education
- IBS 2 Policy and Administration of Career Education
- IBS 3 Career Education—Elementary Level
- IBS 4 Career Education—Intermediate Level
- IBS 5 Career Education—Secondary Level

For further information about the Computer Search in

Career Education or available bibliographies, write or call:

NIU Computer Search in Career Education
P. O. Box 100
Northern Illinois University
DeKalb, Illinois 60115

Phone: 815-753-1251



THE ANCHOR TEST STUDY

For more than three decades measurement specialists and educators have expressed the need for a major test-equating study which would make it possible to compare the results obtained on two or more standardized tests in the same subject. The National Test-Equating Study in Reading, better known as the Anchor Test Study, fulfills this need. By using the data reported in the Anchor Test Study it is possible to translate scores on any one of the following eight widely used standardized reading achievement tests: *California Achievement Tests*, *Comprehensive Tests of Basic Skills*, *Gates MacGinitie Reading Test*, *Iowa Tests of Basic Skills*, *Metropolitan Achievement Tests*, *Sequential Tests of Educational Progress*, *SRA (Science Research Associates) Achievement Series*, and the *Stanford Achievement Tests* to a corresponding score on any of the other tests for pupils in grades 4, 5, and 6.

A second major purpose of the Anchor Test Study was to provide new nationally representative norms for the reading comprehension and vocabulary sections as well as total reading scores for each of the tests in the Study. The standardization population selected for the Study more accurately reflects the composition of the nation's public and private schools than has ever been possible with the national norms provided by test publishers because of the cooperation of the U. S. Commissioner of Education, the Council of Chief State School Officers, and school superintendents and officials. The practical utility of the Anchor Test Study is enhanced by the provision of school mean norms, a means by which average student performance in one school can be compared to the average scores of students in the same grade in schools throughout the nation.

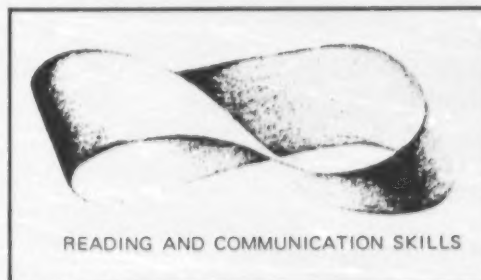
Through the use of the Anchor Test Study, schools can now change tests without losing continuity in their testing programs. Schools within a district or participating in the same programs now can combine and compare their data without being restricted to the use of the same test.

Additional objectives of the Study were to provide new estimates of alternate form reliability (a measure of the extent

to which two equivalent forms of a test are consistent in measuring the specified skills or trait) for each of the tests, to provide estimates of the inter-correlations among the tests, and to explore empirically some methodological issues in test equating.

The Anchor Test Study was planned and funded by the U. S. Office of Education and conducted under contract with Educational Testing Service. The entire 34 volume study will be available only through the ERIC Document Reproduction Service (EDRS). Each of the 34 volumes has been announced in the October 1974 issue of *Research in Education*. Later this year a manual will be available for sale through the Superintendent of Documents, U. S. Government Printing Office. However, the manual also will be available through EDRS.

The ERIC Clearinghouse on Tests, Measurement and Evaluation plans to monitor the literature carefully in order to keep abreast of studies, critiques, and discussions of the Anchor Test Study so that these documents may be considered for announcement in *Research in Education*. By processing the Study and related literature, ERIC/TM hopes to provide a means by which educators and researchers can have easy access to the work and opinions of others concerning this major landmark study in measurement.



A TRIPARTITE-SPONSORED ERIC USERS CONFERENCE

An ERIC Users Conference drawing participants from five midwestern states—Iowa, Wisconsin, Michigan, Illinois, and Minnesota—was sponsored by the ERIC Clearinghouses on Career Education, Early Childhood Education, and Reading and Communication Skills, June 7, 1974, in DeKalb, Illinois. The conference provided over 40 users an opportunity to discuss and better understand the ERIC system.

Present for consultation were Charles Hoover and Frank Smardak of Central ERIC, and twelve representatives of the sponsoring clearinghouses. In addition, Robert Donati of Lockheed Information Services and Roy D. Tally of the Information Retrieval Center of the Wisconsin Department of Public Instruction provided participants with on-line computer search facilities during the entire conference.

In preparation for the conference, some 75 letters were sent to holders of microfiche collections in the five states. There was no registration fee and luncheon was provided through the courtesy of the three clearinghouses. With each letter of invitation a preliminary questionnaire was enclosed which invited participants to offer suggestions or comments on what they would most like to discuss at the conference.

The day was highlighted with a luncheon speech by Charles

Hoover, Chief of ERIC, and a closing session of questions and answers. Three programs were planned taking into consideration the suggestions and comments sent by participants to the clearinghouses:

PROGRAM A

Acquisitions, processing, quality control, information services, reference services, I/A products, and methods for explaining ERIC.

PROGRAM B

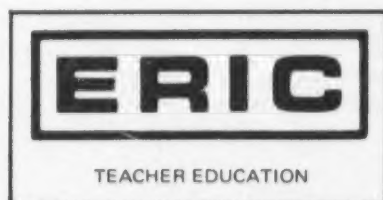
Abstracting and indexing (all participants were asked to index and abstract a document which had been mailed to them earlier).

PROGRAM C

Facilitating use of the ERIC system; searching the system by man and machine.

Following an opening slide/film introduction to ERIC, the participants divided into groups which rotated providing them with an opportunity to participate in all three programs which included batch searching the Northern Illinois University computer, using the ERIC indexes, and using the Career Education Clearinghouse microfiche collection.

The success of this conference can perhaps be measured by the responses of the users themselves. An evaluation form was distributed at the close of the activities which elicited such comments as "It was valuable to have direct conversation with clearinghouse personnel"; "Nice to know that problems are being recognized and improvements are on the way, especially like the new media presentations that are forthcoming"; "Could be a two day session"; "I would like to see these regional meetings continue"; "I learned much today about what clearinghouses do and also met clearinghouse personnel, who can be of help in the future"; and "Feel that time with clearinghouse staff was very worthwhile. The more we understand how they do things, the better use we can make of the ERIC system."



HEALTH, PHYSICAL EDUCATION, AND RECREATION IN THE ERIC SYSTEM

Health, physical education, and recreation are vital components of any educational system. In its effort to store and disseminate valuable research in education, the ERIC system has been and is active in securing HPER material. A computer search of the ERIC data base revealed that as of July 30, 1974 there were the following number of documents for important HPER-related descriptors: Health Education (1,205); Health (635); Physical Education (897); Recreation (399); Recreational Activities (372); Athletics (293); and Athletic Activities (199). When those descriptors were combined to eliminate

overlap, the postings totaled 3,257.

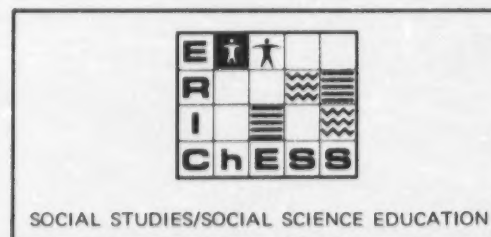
Specific aspects of health, physical education, and recreation are the concern of several ERIC Clearinghouses. In the area of recreation, the Clearinghouse on Rural Education and Small Schools has within its scope the use of outdoor resources both for recreation and as a setting for the teaching of all disciplines. In the area of health, the scope of the Clearinghouse on Counseling and Personnel Services includes drug education, alcohol education, and sex education. Since March 1973, the ERIC Clearinghouse on Teacher Education has had within its scope, in addition to the preparation of educational personnel, the general areas of health, physical education, and recreation.

For its own part, the ERIC Clearinghouse on Teacher Education is attempting to facilitate information dissemination and retrieval in these fields. In an effort to show what material already exists, the Clearinghouse has initiated a series of three annotated bibliographies of material in ERIC on health, physical education, and recreation; the ones on recreation and physical education have been published; the third, on health, is in process. In July 1974, a meeting was held at the Clearinghouse with HPER experts who served as consultants in defining these fields and specifying sources of direction in building up this feature of the Clearinghouse's scope.

The importance of health, physical education, and recreation in the ERIC system is growing, and the future accessibility of material in these areas through ERIC seems very bright.

EDITORS NOTE:

The article, "The Artist as Teacher" printed in ERIC Report, number 5 (July, August 1974) was written by John Aquino, a staff member of the Clearinghouse on Teacher Education.



VALUES EDUCATION

In recent years "values education" has become one of the most exciting, significant, and widespread developments in education. Throughout the nation many persons have finally agreed that the school can and should facilitate value development in students. As a result, an enormous number of values education materials have been produced. These materials reflect many orientations, approaches, goals, and styles. Moreover, there is very little agreement as to the meaning of terms, such as *values* and *valuing*. These and other factors have made it difficult for teachers and curriculum coordinators to make decisions concerning adoption and use of materials for values education. A new publication is attempting to alleviate these problems.

The 6-chapter work is being written by Dr. Patricia Johnson of Florida State University and Dr. Douglas P. Superka of the

ERIC/ChESS staff. Chapter I briefly describes recent developments and current emphases in values education. Chapter II explicates eight distinct approaches to value education. In the third chapter various problems and pitfalls involved in implementing values education efforts are discussed. Suggestions for alleviating and dealing with those problems are offered. Chapter IV describes and explains an analysis instrument developed by the authors to evaluate values education materials. In addition, this instrument will be applied to a sample of materials for each values education approach. The fifth chapter summarizes the findings, discusses some conclusions, and makes recommendations. The last chapter is an extensive, thoroughly organized bibliography (mostly annotated) of student, teacher, and background materials in values education which have been published commercially or abstracted in ERIC.

UTILIZATION OF NEW SOCIAL STUDIES CURRICULUM PROGRAMS

The staff of ERIC/ChESS, under the direction of Mary Jane Turner, is preparing an extensive project entitled the "Utilization of New Social Studies Curriculum Programs." In the social studies, probably more than in some other areas of the elementary and secondary school curriculum, the national move toward curriculum improvement has resulted in a great diversity of new programs, packages, and resources. However, it is not clear to what extent these new materials are being used. Glowing reports from one source on the effectiveness of a particular program are difficult to put into perspective if we do not know the extent to which this program is being used.

Developers could do a better job if they realized that the decision to adopt some kinds of materials is made on the basis of certain features of format or "catchiness," or that teachers uninvolved in adoption decisions are inclined to continue the use of their old program rather than take a chance on the new. The project has developed a questionnaire and sent it to randomly selected social studies teachers in four states, California, Colorado, Connecticut, and Texas. It will attempt to discover how many school districts have adopted the new materials, who made the decision to use the materials, and how they feel about the quality of the new social studies curricula.

LANGUAGES AND LINGUISTICS MEETING USERS CONCERNS

The ERIC Clearinghouse on Languages and Linguistics is now operational at the Center for Applied Linguistics, 1611 North Kent Street, Arlington, Virginia. The Clearinghouse, which had been located at the Modern Language Association in New York City for the past three years, moved to the Center June 1, 1974. Dr. A. Hood Roberts, Deputy Director of the Center for Applied Linguistics, is serving as Director of the Clearinghouse, and Dr. Peter A. Eddy of Western Washington State College is Associate Director.

The ERIC/CLL is responsible for collecting and disseminating information in instructional methodology, psychology of language learning, presentation of cultural and intercultural content, application of linguistics, curricular problems and developments, and teacher training and qualifications specific

to the teaching of language. Documents which concern the language teacher and researcher in the language sciences are also involved, as well as those dealing with psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and instructional materials related to the commonly and uncommonly taught languages, including English for speakers of other languages.

Because the ongoing work of the Center for Applied Linguistics, and the purposes for which it was established, so closely parallel the aims of the ERIC Clearinghouse on Languages and Linguistics, the Center is unusually suited to meet the goals of the Clearinghouse both through the coordination of Clearinghouse work with its own activities and through the provision of highly qualified professional staff to support the work of the Clearinghouse. In the past year alone, for example, the Center's information resources specialists answered almost 5,000 queries relating to languages and linguistics, and this amount should increase considerably now that ERIC/CLL is housed at the Center. These inquiries have been broken down into specific areas and provide an excellent indication of current concerns among consumers.

A program for the acquisition of documents having potential merit for inclusion in *R/E* is now in process at ERIC/CLL. Foreign language departments, linguistics departments, foreign language education departments, state and local foreign language supervisors and English as a second language specialists, regional education laboratories, other research and development centers, and relevant federal agencies are being contacted to alert them to materials recently processed into the ERIC system and to solicit from them candidate materials for ERIC. A large number of journals are also being monitored for articles to be cited in *C/I/E*.

Several innovative projects are underway at ERIC/CLL. In order to obtain more information and feedback from ERIC users, a local advisory board composed of subject matter specialists based in the Washington, D.C. area and an equal number of key persons in the information processing systems of each of the metropolitan communities has been set up. The Clearinghouse is also in the process of informing editors of language-specific journals and of state foreign language newsletters and journals about its plans to prepare special-interest columns giving information about current Clearinghouse activities and announcing recent ERIC accessions—with resumes—of interest to readers of these journals. Included in the state journal columns will be information on the location of the ERIC collections within that particular state. And since language relates to so many other fields, ERIC/CLL is planning to publish about half a dozen joint state-of-the-art papers with other ERIC clearinghouses.



HIGHER EDUCATION

Peter P. Muirhead, former U. S. Deputy Commissioner for Higher Education at the U. S. Office of Education, has accepted the directorship of the ERIC Clearinghouse on Higher Education beginning September 1, 1974. Mr. Muirhead

brings to the Clearinghouse vast practical experience in dealing with state and federal higher education problems on the highest level. He will be responsible for all Clearinghouse operations, including implementing the recommendations of the Advisory Board, increasing linkages between the Clearinghouse and the general higher education community, and selecting topics and authors for the information analysis products. In addition to his responsibilities as Director, Mr. Muirhead will be teaching at the George Washington University and participating in the G.W.U. Educational Leadership Seminar.

Mr. Muirhead views the Clearinghouse, like its counterparts, as an exemplary system by which educational researchers share their findings with the educational community. His efforts will be directed toward the improvement of the dissemination of materials throughout the educational community with particular emphasis on policy- and decisionmakers. More effective means to increase an awareness of ERIC in the educational community will be investigated so that the ERIC system will be more instrumental in policy formation. More timely, structured interaction on current problems will be achieved through workshops and information products targeted toward special problem areas. This new approach means greater emphasis on reaching the public as well as the creation of an interface between the theoretical, conceptual basis of higher education and the day to day dilemmas facing higher education.

Mr. Muirhead brings to the Clearinghouse a wealth of personal experiences and information to achieve these goals. A recipient of many honors and awards, he has been listed in *Who's Who in America*, participated in the President's Commission on Financing Postsecondary Education, and received eight honorary doctorate awards.

Professionally, Mr. Muirhead has played an important role in the formation of educational policy. Prior to his position as U. S. Deputy Commissioner for Higher Education, he was the Associate Commissioner for Higher Education, U. S. Office of Education, Assistant Commissioner for Legislation and Program Planning, and Director of Higher Education Programs. In addition, he served as a consultant to the American Council on Education, the College Entrance Examination Board, the Carnegie Commission on Higher Education, and various other organizations. Mr. Muirhead also has been a visiting lecturer at Harvard University, Cornell University, Syracuse University, the United States Information Agency (USSR), and the University Grants Committee (United Kingdom).

Carl J. Lange, past Director of the ERIC Clearinghouse on Higher Education, will continue at George Washington University in his capacity as Assistant Vice President for Sponsored Research and has been appointed to direct a multidisciplinary doctoral program on Educational Policy Studies in the Graduate School of Arts and Sciences. As chairman of this new program, Dr. Lange has the responsibility of creating from disciplinary areas such as political science, economics, sociology, statistics, and other analytically oriented courses, a viable program that will equip future educational policy and decisionmakers with the necessary analytical tools required to understand the complex needs of higher education in the future.



The *Understanding Young Children Series* (UYC) is one of the bright spots of the ERIC/ECE user information efforts. Its easy-to-read text, complemented by cartoon-style drawings, is useful for teachers, parents, and caregivers of "normal" and handicapped young children.

The UYC series (a collection of five publications) was written by Colleen Mayer and illustrated by De Lana Acton and Colleen Mayer, at the Alaska Treatment Center for Crippled Children and Adults. The series is unique because it gives early childhood development information, as well as enough information on handicapping conditions for teachers to learn to recognize and handle children with developmental disabilities in their own classrooms.

UYC was originally developed as teacher training material for use in Head Start programs in rural Alaska. In light of the extraordinary amount of requests for information related to handicapped children in early childhood, and because the Alaska group had exhausted its supply of copies, the ERIC/ECE staff offered to give the series a wider dissemination as an information product. The following is an annotated listing of the individual titles in the series:

Understanding Young Children: The Handicapped Child in the Normal Preschool Class (Cat. No. 114, 73 pages).

Contains some basic information concerning visual, auditory and motor disabilities, plus some suggestions for integrating the handicapped child into normal classroom routines.

Understanding Young Children: Emotional and Behavioral Development and Disabilities (Cat. No. 115, 78 pages).

Filled with examples, this booklet emphasizes teaching techniques for helping young children gain emotional maturity and self-discipline.

Understanding Young Children: Intellectual Development and Intellectual Disabilities (Cat. No. 118, 41 pages).

Discusses intellectual development and different stages of learning. Offers learning activity suggestions.

Understanding Young Children: Learning Development and Learning Disabilities (Cat. No. 116, 31 pages).

Discusses heredity, maturation and environment; also, describes techniques to assist children in overcoming learning disabilities.

Understanding Young Children: Language Development and Language Disabilities (Cat. No. 117, 35 pages).

Examines some factors involved in language development and some common causes of language disabilities. Gives many suggestions for language activities.

NEW PRODUCTS AND SERVICES

The following products and services are available from the clearinghouses or as noted. Clearinghouse addresses may be found on the inside back cover.

CAREER EDUCATION

General Reference Sources on Career Education

Career Education and Annotated Bibliographies, Bibliographies, Abstracts, Literature Reviews, Resource Guides, Instructional Materials, Instructional Aids, Curriculum Guides, Reference Materials. (IBS 1)

Policy and Administration of Career Education

Career Education and Program Administration, Program Coordination, Program Development, Program Planning, Administrator Guides, Administrative Policy, Administrative Principles, Administrator Role, Administrative Problems, Administration, Educational Administration, Educational Planning, Management. (IBS 2)

Career Education—Elementary Level

Career Education and Elementary Education, Elementary Schools, Elementary School Students, Elementary Grades, Elementary School Curriculum. (IBS 3)

Career Education—Intermediate Level

Career Education and Middle Schools, Intermediate Grades, Junior High Schools. (IBS 4)

Career Education—Secondary Level

Career Education and Secondary Education, Secondary Grades, Secondary Schools, High Schools, Secondary School Students, High School Students, High School Curriculum. (IBS 5)

The Continuing Education Unit, by Anne Kaplan and Clive C. Veri.

This monograph will be published in cooperation with the Illinois Board of Community College Education, Kankakee Community College, Central YMCA Community College, and the College of Continuing Education at Northern Illinois University. Arranged in three parts, this administrative guide to the implementation of the CEU will report on existing state plans, propose a system model, and furnish an annotated comprehensive bibliography to the subject literature. Materials cited in the publication will be available from the ERIC system. Appendices will include a complete membership list of

the National Task Force, the "HEGIS" code, and official report forms to state accrediting agencies.

A Conceptual Model: The Roles of the Teacher, the Counselor, the Community, and Media in Career Guidance and Career Education, by Betty J. Bosdell and JoAnn Harris.

This analysis will explain past roles of teachers, counselors, community, and media in the vocational choice process and compare these existing roles with present career development and career education concepts. It will then present necessary curricular, guidance, and media models for the delivery of career education/guidance at the elementary, secondary, college, and adult levels and attempt to synthesize them. The target population of the work is those who have responsibility for planning and implementing sequential, developmental career education programs. Emphasis will be given to proposing a conceptual model which can be implemented in the practical school and community setting.

COUNSELING AND PERSONNEL SERVICES

Paraprofessionals in the Human Services, by Libby Benjamin, Sherry Davidson, and Wendy Suss.

This report (1) investigates the role of the paraprofessional counselor by reviewing the factors that have led to the emergence of the need for such persons; (2) examines a number of programs that utilize the services of non-professional guidance personnel; (3) suggests some guidelines that research suggests are important in selecting, training and evaluating paraprofessionals; (4) discusses the effects on professionals, institutions, and the persons themselves of their employment as workers in the counseling field; and (5) takes a look at the future of the paraprofessional movement in pupil personnel services.

ERIC/CAPS, 2108 School of Education Building, University of Michigan, Ann Arbor, Michigan 48104. \$6.60 (Make checks payable to the University of Michigan). (This publication will be available through EDRS at a later date.)

Impact, Vol. 3, No. 2, edited by Garry R. Walz and Susan F. Kersch.

The emphasis of this issue is on examining models, techniques, and programs, and deals specifically with outreach counseling, motivation techniques, higher education, high school pupil personnel service, and life-career planning for women. Major articles in these areas are by David Drum and Howard Figler, Dennis Meadows and Lewis Perelman, Raymond Wlodkowski, Joseph Kloba, Janet Khan and Martha Price. A "One-Acting-Out Play" by Kenneth Hoetzel is facetiously presented to attempt to tie together the various psychological theories currently prevalent.

Impact, P.O. Box 635, Ann Arbor, Michigan 48107. \$1.75 (Subscription price, \$9.00. Make checks payable to the University of Michigan).

An Experimentalist Approach to Counseling, by Richard T. Knowles and Cho Yee-To.

Rather than attempting to trace all of the philosophical roots of guidance and counseling, the present study is concerned with spelling out some basic themes of one philosopher, John Dewey, and with projecting from these themes the role of the counselor. Part One of this study deals with three basic themes of John Dewey's philosophy: the nature of man, the method of intelligence, and the democratic ideal. Part Two is a discussion of the roles of the counselor which stem from Dewey's treatment of these themes.

ERIC/CAPS, 2108 School of Education Building, University of Michigan, Ann Arbor, Michigan 48104. \$4.00 (Make checks payable to the University of Michigan.) (This publication will be available through EDRS at a later date.)

THE DISADVANTAGED

An Affluent Society's Excuses for Inequality: Developmental, Economic, and Educational, by Edmund W. Gordon with Derek Green. Urban Disadvantaged Series No. 35.

Recent publications by several scholars have been the basis of attempts to use educational and behavioral science data to support the assertion that schooling can make little difference in the efforts of low-status people to achieve equality or a fair chance at survival. What is more important than how these scholars feel and what their motives may be is what the media try to tell us about the meaning of this work and what the society decides to do about the problems at which their work is directed.

Available as ED 087 823 from EDRS; MF \$0.75, HC \$1.50.

Nutrition and Mental Development, by Joan Dye Gussow. Urban Disadvantaged Series No. 36.

During the sixties, a growing body of experimental evidence suggesting that early malnutrition could affect the development and functioning of the brain was translated into a concern that nutritional deprivation might be producing permanent mental retardation among disadvantaged children. The purpose of the present paper is to show, through a review of the relevant literature, that such a concern while humanitarian in its inspiration is misplaced.

Available as ED 090 332 from EDRS; MF \$0.75, HC \$1.85.

Personality and Family Background Correlates of Academic Performance in Minority Students: A Review of Research, by Renee Woloshin. Urban Disadvantaged Series No. 37.

This paper reviews studies which have examined the relationship of various non-intellective variables to the academic performance of minority populations. It was found to be difficult to draw any definite conclusions regarding such relationships because not enough research has been done and much of the research that has been done is marred by methodological limitations.

Implementation of ESEA Title I: A Problem of Compliance, by Milbrey W. McLaughlin. Urban Disadvantaged Series No. 39.

Five factors are assumed to promote compliance to policy directives: goals, an incentive system, information feedback, reliable knowledge about effective strategies, and effective authority. Weakness in any one of these is likely to undermine the others. In the Case of Title I, each one was deficient or unstable in some respect.

Early Childhood Education for the Disadvantaged: An Annotated Bibliography of Doctoral Dissertations, by Adelaide Jablonsky. Doctoral Research Series No. 3.

The items listed are organized in the following sections: Head Start Programs, Follow Through Programs, Language, Reading and Mathematics, Behavior and Attitudes, Parent Involvement, Creativity, and Miscellaneous. Author, institution, and subject indexes are included.

Available as ED 079 438 from EDRS; MF \$0.75, HC \$10.20.

Curriculum and Instruction for Minority Groups: An Annotated Bibliography of Doctoral Dissertations, by Adelaide Jablonsky. Doctoral Research Series No. 4.

The citations have been organized into the following areas: Social Studies, Black Studies, Mathematics, Science, Art and Creativity, Reading and Language Arts, and Interdepartmental and Other Areas. Author, institution, and subject indexes are included.

Available as ED 086 748 from EDRS; MF \$0.75, HC \$5.40.

Research on the Education of Black and Black-White Populations: An Annotated Bibliography of Doctoral Dissertations, by Adelaide Jablonsky. Doctoral Research Series No. 5.

Citations on black populations are divided among the following sections: Reading and Language Arts; Self Concept; Attitudes, Aspirations, and Behavior; Parental and Cultural Influences; and Vocation. Sections on black-white populations deal with Reading and Language Arts; Attitudes, Aspirations, and Self Concept; and Miscellaneous. Author, institution, and subject indexes are included.

The Education of Puerto Rican Children and Youth: An Annotated Bibliography of Doctoral Dissertations, by Adelaide Jablonsky. Doctoral Research Series No. 6.

The three sections of this bibliography are: Studies of Puerto Rican Students on the Mainland; Comparisons of Puerto Rican Students with Other Ethnic Groups; and Studies of Schools and Students in Puerto Rico. Author, institution, and subject indexes are included.

"Racial Discrimination Through Mental Testing: A Social Critic's Point of View," by Ronald J. Samuda. *IRCD Bulletin*, No. 42.

This paper is a critical review of the research done on

intelligence testing. It deals with such issues as: the social criticism of testing through numerous lawsuits, court rulings, and in the positions taken by leading professional associations such as APGA; use of IQ tests for grouping purposes; experiments related to the test environment; the self-fulfilling prophesy phenomena; and the effects of language differences on test results. It is held that the present trend points toward an expansion and elaboration of psychometrics rather than an abolition of objective tests.

EARLY CHILDHOOD EDUCATION

Education for Parents of Preschoolers: An Abstract Bibliography, compiled by Norma K. Howard (68 pages, No. 111, \$1.60).

Cites documents and journal articles on parent education and parent involvement for the child's preschool years. Included are reports of both home-based and center-based programs.

Working With Parents in the Primary School: An Abstract Bibliography, compiled by Norma K. Howard (56 pages, No. 112, \$1.60).

Cites documents and journal articles on parent education and parent involvement during the child's kindergarten and elementary school years.

Research on Approaches to Early Education: An Abstract Bibliography, (78 pages, No. 113, \$2.00).

Contains documents and journal references covering family involvement, research on the long-term effects of educational intervention programs, and research on specific program models.

Regular Class Placement of the Exceptional Child: An Abstract Bibliography, compiled by Norma K. Howard (52 pages, No. 119, \$1.50).

Cites documents and journal articles on placement of exceptional children (handicapped, gifted) in regular preschool, kindergarten and elementary classrooms.

EDUCATIONAL MANAGEMENT

The Clearinghouse has joined forces with the National Association of Elementary School Principals to produce a new series of publications, the *School Leadership Digest*. Consisting of 13 monthly reports, the series is aimed at the practitioner rather than the theoretician and concentrates on the practical implications of research.

The first four titles in the series are announced below. Individual reports cannot be ordered separately, but are available only as part of the entire series from the National Association of Elementary School Principals, 1801 North Moore Street, Arlington, Virginia 22209. Subscription price is \$24.

Year Round Schools, by Dee Schofield. *School Leadership Digest Series, Number One*.

Reviews a variety of school calendar changes, examining the questions of saving money and improving education, assessing the needs and planning the program, involving the community, and describing several plans currently in operation.

Middle Schools, by Nan Coppock. *School Leadership Digest Series, Number Two*.

Explores the philosophy that takes into account the wide range of physical, intellectual, and emotional differences among pupils between childhood and adolescence. Historical roots and present trends, ideal program characteristics, and the need for special staff training are considered.

Class Size, by Dee Schofield. *School Leadership Digest Series, Number Three*.

Discusses and evaluates the problems and weaknesses of the research dealing with class size, relationship to the educational process, academic and non-academic effects of class size, and economic aspects. Attitudes of students, teachers, and administrators are reported.

Community Schools, by Dee Schofield. *School Leadership Digest Series, Number Four*.

Looks at the theory, history, and implementation of community schools, describing administration and staffing for decentralized decision-making and group leadership, developing a curriculum serving community interests, planning facilities open to everyone, and suggesting answers to the questions of financing.

The Politics of Education, by Laurence Iannaccone and Peter J. Cistone. *ERIC/CEM State-of-the-Knowledge Series, Number Twenty*.

Reflecting the increasing connection of education with the world of politics, this monograph analyzes the relevant literature. Main arenas and salient issues come under examination, focusing on the particular form educational politics takes at the local, urban, state, and federal levels.

Available from the Clearinghouse. (\$2.50 prepaid, checks payable to ERIC/CEM Publications.)

Directory of Organizations and Personnel in Educational Management. Fourth edition, compiled by Philip K. Piele and Stuart C. Smith.

This up-to-date, enlarged edition of a previously issued directory for locating information about research in educational management lists 152 organizations and 535 individuals involved in all phases of educational management and facilities.

Available from the Clearinghouse. (\$3.50 prepaid, checks payable to ERIC/CEM Publications.)

HIGHER EDUCATION

Urban Internships in Higher Education, by Donald G. Zauderer.

Focuses on the objectives of internship programs, role allocation, and issues and problems associated with this form of experimental education. Goals and objectives of internship training are reviewed in relation to the student as primary beneficiary, the university interest in internship programs, and benefits to the host agency.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

The Changing Profile of College Students, by Robert H. Fenske and Craig S. Scott.

Studies the new trends in student enrollments through a review of current research literature and analysis of the characteristics of students in a national sample of over half a million students during a recent five-year period. The review also covers the factors apparently related to the new enrollment trend.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

The "Benefits Crisis" in Higher Education, by Oscar T. Lenning.

Focuses attention on, and stimulates discussion about the various non-intellective outputs of college, the relative importance of various college outputs, factors accounting for different nonintellective outputs, and the significance of such outputs and relationships for the practical concerns of administrators and others in higher education.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

Proprietary Schools and Postsecondary Education, by David A. Trivett.

Describes proprietary schools, and profit-oriented, privately-owned institutions that train students for job entry. Emphasis is placed on the role proprietary education plays in the career development of the students, the effectiveness of proprietary education, the type of schools and the type of organization that make up the area of proprietary education.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$2.00—prepaid).

How Much Change for a Dollar? A Look at Title III, by Harold Hodgkinson.

Summarizes the literature on the impact of the Title III on higher education. To what degree were the objectives of the Title III program met, what were the most significant developments, what were the failures and what further treatment is needed.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$3.00—prepaid).

Higher Education and the Steady State, by Larry L. Leslie and Howard F. Miller, Jr.

Examines the "no-growth" phenomenon in higher education. A framework is presented for viewing what is occurring in higher education as it seeks to resume a dynamic state of growth. The authors conclude that higher education is attempting to develop new products, new methods, new markets, new productive factors, and is reorganizing and restructuring the enterprise.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$3.00—prepaid).

The Personalized System of Instruction: An Educational Alternative, by Robert S. Ruskin.

This paper reviews recent developments in the use of individualized instruction in higher education. The range and types of courses which have been developed as "individualized" and the evaluations of such courses are summarized.

Guidelines for wider application of this general approach are developed.

American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 (\$3.00—prepaid).

INFORMATION RESOURCES

Educational Media and Technology: Publications from ERIC at Stanford 1967-1973, compiled by the ERIC Clearinghouse on Information Resources.

A collection of abstracts of all papers published by the ERIC Clearinghouse on Educational Media and Technology at Stanford University. Includes all 59 "information analysis products" published by ERIC/EM ranging in subjects from research-oriented studies to basic classroom "how-to" guides. Was issued as a documentation of the former Clearinghouse's contributions to the field of media and technology.

Available from EDRS when ED number is announced. Also available for \$2.50 from: Box E, School of Education, Stanford University, Stanford, California 94305. Checks made payable to Box E must be included with orders.

A Guide to Educational Resources, by Marda Woodbury, updated by the ERIC Clearinghouse on Information Resources.

An updated (Summer 1974) version of a guide originally published in 1971 by the Far West Laboratory for Educational Research and Development. The Guide includes 35 pages of resources geared for the Educational Information Consultant. They were chosen to help the consultant find standard sources of information and to keep him abreast of major current activities, products, sources, and innovations. It includes resources on general fact finding and sources of information; where it's happening (places to contact); keeping up with the educational information explosion; research and resource services; product guides; and organizing information.

Available for \$3.50 from: Box E, School of Education, Stanford University, Stanford, California 94305. Checks made payable to Box E must be included with orders. Level of availability from EDRS uncertain at this time.

Evergreen: Profile of a New College, by Don H. Coombs and James J. Prevel.

An 11-page paper documenting the formation of Evergreen State College, Olympia, Washington, which relies heavily on audiovisual resources and media for its coursework.

Available as IR 000 824 from EDRS.

Indexing for the Growing Instructional Media Center, by George Abbott.

A 25-page paper which describes various methods for indexing nonprint media. The writing is geared to instructional material centers.

Available as ED 086 228 from EDRS.

JUNIOR COLLEGES

Newest Topical Papers available free on request from the Clearinghouse.

The Role of the Academic Dean, by William F. Shawl. Number 42.

Discusses how the role of the academic dean changes under collective bargaining and other recent developments that affect personnel relations. It advises academic deans on anticipated role shifts, the need for assistants, what a dean can and cannot be expected to accomplish now as compared to his role under a more authoritarian structure.

The Do Everything College, by Joanne Frankel, Number 43.

Contrasts the greatly expanding role of the contemporary community college with its limited historical functions. It includes an analysis of several new fields such as rural out-reach programs, programs for the aged, servicemen, preschoolers and prisoners providing a context in which administrators and faculty can better understand and define the role of their instructors.

World Game Study in the Community College, by Martin J. Cohen, Number 44.

Describes a unique program being offered in a community college. The paper provides measures for evaluating such alternative curricula and discusses some of the problems of implementing such a program in a traditional college context.

Faculty in an Innovative Community College, by Leslie Purdy, Number 45.

Discusses sources of resistance to innovation, faculty informal organization, and faculty attitudes toward technological teaching media.

Career Counseling in the Community College, by Charles Healy.

Designed for counselors who help adolescents and young adults in their career development. Thirteen distinct, replicable procedures are presented for helping people make and implement career plans.

Available from the publisher: Charles C. Thomas, 301 East Lawrence Avenue, Springfield, Illinois 62803. Paper copy \$5.95; Hard bound \$7.95.

SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION

Research on Mathematics Education (K-12) Reported in 1973, by Marilyn N. Suydam and J. F. Weaver.

Research completed in the area of mathematics education for the year 1973 is listed. Sources of the studies are also given.

Available from the Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. Also available as ED 091 239 from EDRS; MF \$0.75, HC \$4.20.

A Survey of Doctoral Programs in Mathematics Education, by Jerry A. McIntosh and F. Joe Crosswhite.

Survey and description of doctoral programs offered in mathematics education in the United States.

Available from the Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210. Also available as ED 091 250 from EDRS; MF \$0.75, HC \$1.85.

Unpublished Evaluation Instruments in Science Education: A Handbook, by Victor J. Mayer.

Identifies and lists unpublished instruments related to science education. Provides data about all tests and indicates sources. Copies of several tests are included in the appendixes.

Available from the Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210, \$3.50. (ED number not yet available—SE 018 188).

A Survey of Science Teaching in Public Schools of the United States (1971), by Fred R. Schlessinger, And Others. Volume 1, Secondary Schools.

Reports descriptive results of a survey of a national sample of public secondary schools in the United States (over 6,000). Data on teaching practices, materials used, school facilities, etc. are reported nationally and by region.

Available from the Center for Science and Mathematics Education, 244 Arps Hall, The Ohio State University, Columbus, Ohio 43210, \$3.50. (ED number not yet available—SE 018 092).

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION

Geography in Elementary and Secondary Education: Tradition to Opportunity, by George Vuicich and Joseph Stoltman.

This paper surveys the historical trends in geography education with special attention to the major developments occurring in the 1960s. The authors project trends in geography education and provide illustrations of new approaches. Included are annotated bibliographies of sources for teaching geography.

Available from SSEC, 855 Broadway, Boulder, Colorado 80302 (publication number and price not assigned); and EDRS (to be announced).

Looking At . . .

An occasional topical information sheet. It includes an interview with experts in the field, book reviews, blurbs on material and organization resources related to the topic. Three new issues are available:

Looking At Women's Studies

Looking At Mini Courses

Looking At Global Studies

These are in addition to *Looking At Future Studies* and *Looking At Legal Education*.

Free copies may be obtained on request from the Clearinghouse.

Preparing to Teach Political Science: Sources and Approaches, by Mary Jane Turner.

The author delineates three major approaches to the teaching of precollegiate political science and provides well annotated lists of curriculum materials packages that fit within each category. The "academic disciplines" approach includes materials that emphasize the content and/or methodology of one or more of the disciplines of history, economics, sociology, anthropology, psychology, geography, and philosophy in dealing with political phenomena. The "salient features of political life" approach includes materials that focus on groups and group process, institutions, legal and constitutional law, power and influence, or decision making. Approaches emphasizing the "fact-value distinction" are epitomized by materials dealing with values and the valuing

process in politics. The paper also contains a section on "Ways to Restructure Existing Course Structures" and an annotated listing of general background materials in political science for teachers.

Available from SSEC, 855 Broadway, Boulder, Colorado 80302 (publication number 170, \$1.20); and EDRS (to be announced).

Simulation/Games in Social Studies: What Do We Know? by Katherine Chapman, James E. Davis, and Andrea Meier.

The authors answer the question with (1) an intensive review of the theoretical and research literature on gaming and social simulation, (2) an analysis of patterns of use and integration of simulation/games within several of the new social studies curriculum materials, and (3) an analytical framework for examining and evaluating various simulation-type activities.

Available from SSEC, 855 Broadway, Boulder, Colorado 80302 (publication number 162, \$2.50); and EDRS (to be announced).

The Status of Political Science Instruction in American Secondary Schools, by Mary Jane Turner.

Recent shifts in thinking about precollegiate teaching of political science are the focus of this paper. The societal pressures for curriculum reform in the late fifties and early sixties and the responses of educators and political scientists to them are discussed. The resulting new curriculum materials with political science content are described, using many specific examples. New trends in textbooks and related materials, games and simulations, and social action programs are also described. The paper contains bibliographies of curriculum materials and games and simulations with political science content.

Available from SSEC, 855 Broadway, Boulder, Colorado 80302 (publication number 169, \$1.50); and EDRS (to be announced).

TEACHER EDUCATION

Protocol Materials: Training Materials for Uniting Theory and Practice, by Joel L. Burdin and Donald R. Cruickshank, comps. 114 p.

Seven papers by writers who have been extensively involved in the preparation and use of protocol materials in teacher education.

SP 008 176. ED number will be announced in November 1974 RIE. EDRS Price: MF—\$0.75; HC—\$5.40.

Single copies available free from the Clearinghouse while the supply lasts.

Education Prisoners for Socially Constructive Roles, by Ward Sinclair and William E. Moulden. 67 p.

Reviews problems, alternatives, and recent developments in the education of prisoners, including certification of inmate teachers.

SP 008 227. ED number will be announced in November 1974 RIE. EDRS Price: MF—\$0.75; HC—\$3.15.

Single copies available free from the Clearinghouse while the supply lasts.

Behavior of Innovative Personnel, by Gary A. Griffin and Ann Lieberman. 21 p.

Discusses characteristics of educational personnel and other factors that affect innovative action.

SP 008 226. ED number will be announced in November RIE. EDRS Price: MF—\$0.75; HC—\$1.50.

Single copies available free from the Clearinghouse while the supply lasts.

Compendium of Noncommercially Prepared Nonprint Resources in Educational Personnel Preparation, by Wesley C. Meierhenry. 263 p.

A reference tool which supplies descriptions and ordering information for a wide variety of nonprint resources.

SP 008 049. ED number will be announced in October RIE. EDRS Price: MF—\$0.75; HC—\$12.60.

Single copies available free from the Clearinghouse while the supply lasts.

TESTS, MEASUREMENT, AND EVALUATION

State Testing Programs: Status, Problems, and Prospects, by Robert L. Ebel.

The history, current status, and educational implications of state testing programs are described in this brief state of the art review.

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